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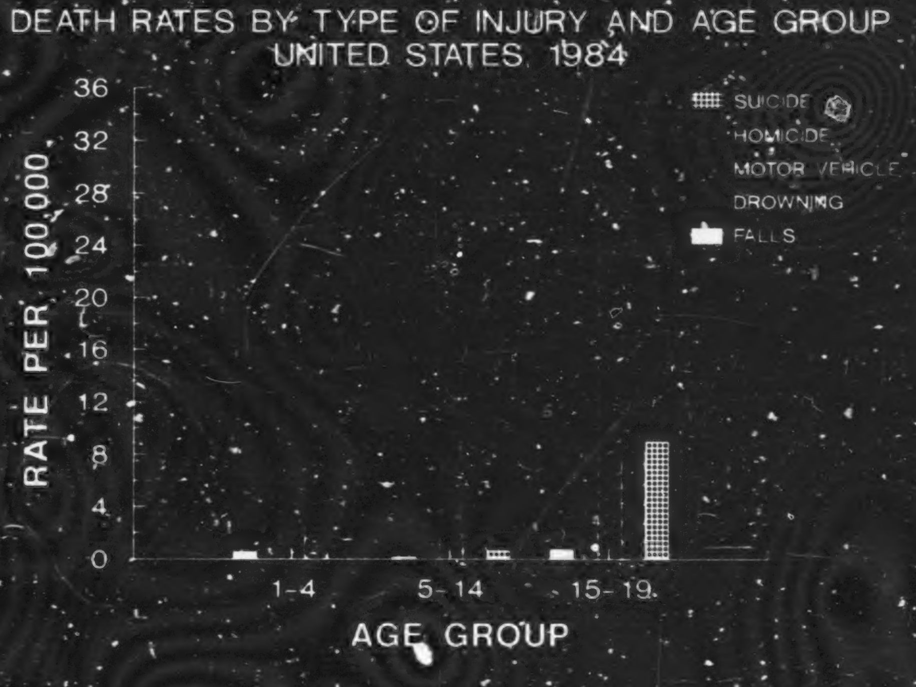
Prevention of Injuries to Children and Youth: A Selected Bibliography



DEATH RATES BY TYPE OF INJURY AND AGE GROUP
UNITED STATES 1984

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U. S. Department of Health and Human Services
Public Health Service
Centers for Disease Control
Center for Environmental Health and Center for Health Promotion and Education
Atlanta, Georgia 30333

Spring 1987

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Prevention of Injuries to Children and Youth: A Selected Bibliography

U. S. Department of Health and Human Services
Public Health Service
Centers for Disease Control
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Atlanta, Georgia 30333

Spring 1987

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PREVENTION OF INJURIES TO CHILDREN AND YOUTH: A SELECTED BIBLIOGRAPHY

This bibliography is a cooperative effort between the Center for Environmental Health and the Center for Health Promotion and Education of the Centers for Disease Control. It is a contribution to the Department of Health and Human Services initiatives to extend and improve the health and quality of life of children and youth while we seek to achieve the 1990 objectives for injury prevention.

The bibliography contains abstracts of literature items and programs selected to reflect the types of injuries experienced by children and youth and current concepts employed to prevent or reduce these injuries. The items were obtained by searching relevant computerized databases and by contacting organizations and individuals active in the areas of injury control and health promotion for children and adolescents. No one bibliography can ever cover all resources on a subject as broad as this one which encompasses so many factors. Undoubtedly, there are excellent programs that are not in this bibliography which did not come to our attention through these channels. However, this bibliography does include items indicative of the types of research and program efforts being conducted to prevent injuries among this population group.

Prepared by:

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Director, Vernon N. Houk, M.D.

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Centers for Disease Control
Atlanta, Georgia 30333

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PREVENTION OF INJURIES TO CHILDREN AND YOUTH: A SELECTED BIBLIOGRAPHY

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iv

PREVENTION OF INJURIES TO CHILDREN AND YOUTH
AN OVERVIEW

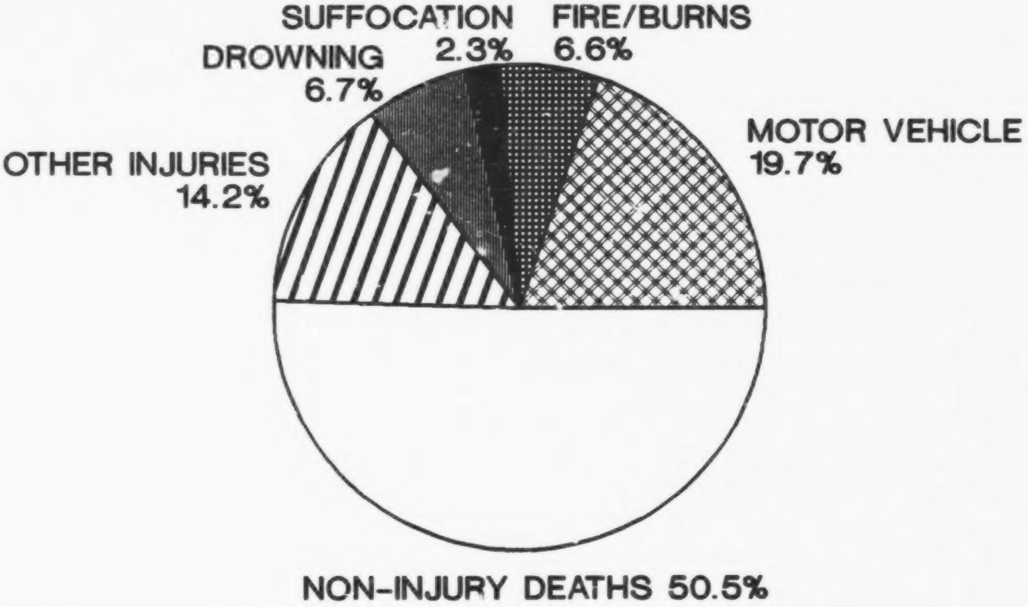
Injury is the number one killer of children. Forty-six percent of deaths in 1-4 year olds and 55 percent of deaths in 5-14 year olds are caused by injuries. Among children under 15, motor vehicle crashes, fires, drownings, and suffocations are the leading causes of injury death (Figure A). About 40 percent of all pedestrian deaths are among children.

Injury fatality rates for adolescents and teenagers are higher than for any other age group except the elderly. The leading causes of injury death among adolescents and teenagers are motor vehicle crashes, firearm injuries, and drownings. Most of the fatalities involve motor vehicles.

Alcohol has been implicated in approximately half of the teenage injury deaths caused by motor vehicle crashes. Alcohol is also a factor in many teenage poisonings, drownings, and firearm-related deaths.

FIGURE A

CAUSES OF DEATH AMONG CHILDREN AGES 1-14
UNITED STATES, 1984



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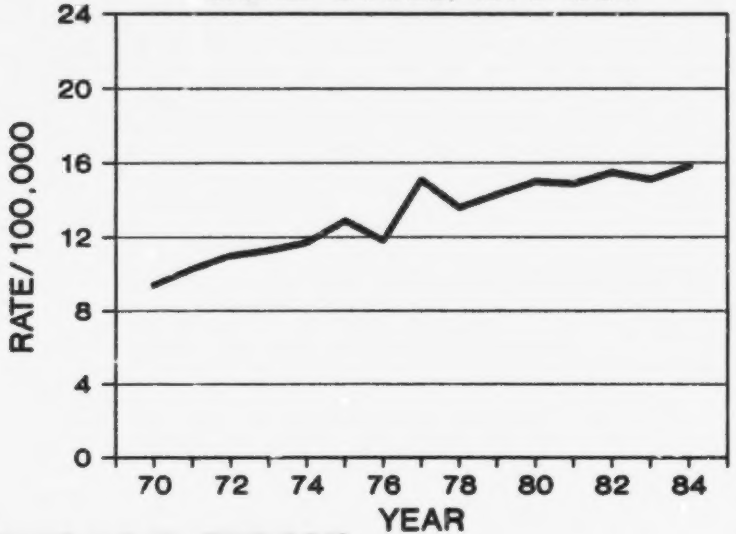
Homicide and suicide cause many adolescent and teenage deaths each year. The suicide rate among white males 15-19 years of age increased by 60 percent between 1970 and 1980 (Figure B), and homicide is the leading cause of death for black males 15-24 years old (Figure C). According to the report of the Secretary's Task Force on Black and Minority Health *(1)*, homicide is among six causes contributing to 80 percent of yearly excess mortality among minorities. Because of the enormity of this problem, several pertinent publications on homicide and suicide have been included in the selected references of this bibliography, although the primary focus of this bibliography is on other types of injuries.

FIGURE B

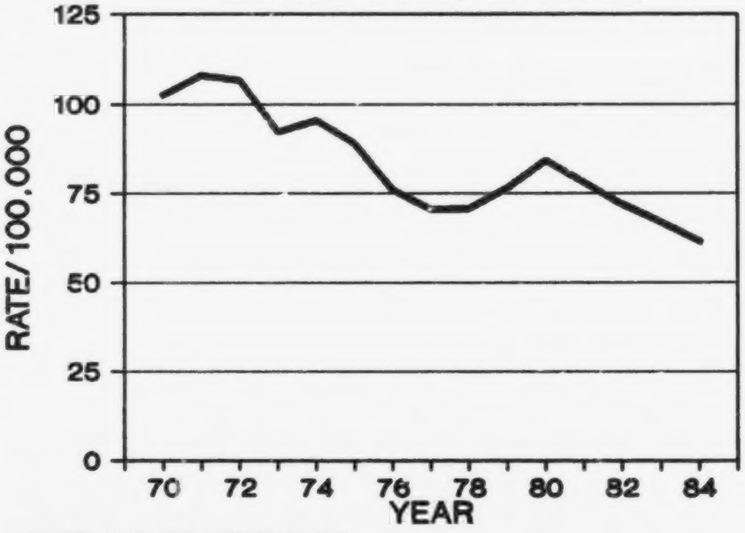
SUICIDE RATES IN 15-19 YEAR OLD WHITE MALES
UNITED STATES, 1970-1984



SOURCE: NCHS VITAL STATISTICS TAPE

FIGURE C

HOMICIDE RATES AMONG BLACK MALES AGES 15-24
UNITED STATES, 1970-1984



SOURCE: NCHS VITAL STATISTICS TAPE

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Mortality data on childhood and teenage injuries represent only the very tip of the iceberg. Morbidity data, however, capture the magnitude of the injury problem and encompass many degrees of injury severity. Further, morbidity data underscore the impact of injuries to children and youth in terms of disability and restricted activity. In one study of childhood injuries *(2)*, there were 45 hospitalizations and 1,300 emergency room visits for each death.

The risk of a particular injury varies with age and often is related to developmental and behavioral characteristics of children and youth. Environmental factors are also associated with the risk of injury. For example:

- Children under six years old are at highest risk for poisonings, burns, and fall-related injuries.
- Children between 6 and 12 years old are at high risk for fall, motor vehicle, and sports-related injuries.
- Youth between 13 and 19 years old are at high risk for sports-related injuries, firearm injuries, motor vehicle injuries, and drownings.

Many injuries among children and youth are preventable. Contemporary success stories provide evidence of this:

- Childhood poisonings have been markedly reduced as a result of the requirement that potentially hazardous drugs and household products be sold in child-resistant containers *(3)*.
- Legislation mandating the installation and use of approved child restraint devices for infants and young children has proven effective in reducing automobile fatalities and serious injuries. In one State use of mandated child restraint devices resulted in a 50 percent decrease in deaths among children younger than four years old *(4)*.
- Toddler swimming pool drownings have been virtually eliminated in some areas because of legislation requiring protective fences with self-latching gates around public and home pools *(5)*.
- In one major U.S. city, child injuries and deaths due to falls from windows were significantly reduced when the local health department provided free, easily-installed window guards to families with young children living in high-risk areas *(6)*.

Successes such as these provide incentives for health professionals and decision-makers to invest in injury prevention. The immediate challenge is to ensure that injury control receives a share of the attention commensurate with the magnitude of the problem. Epidemiologic descriptions of the childhood injury problem, effective interventions, and legislation have aided in the implementation of childhood injury prevention programs in a rapidly growing number of States and communities.

"The 1990 Objectives for the Nation" highlights the injury prevention problem in children and youth. Objectives have been established to improve health status, reduce risk factors, increase awareness, and improve protection and surveillance among these groups. Based upon available data, it is likely that our nation can achieve most of these target objectives.

Injuries among children and youth require special attention. Both have high specific injury types, and the toll of fatal injuries goes far beyond death rates alone. Years of potential life and productivity lost are more telling measures.

The scientific and epidemiologic bases for injury prevention have been established, and effective control measures have been developed. There are growing opportunities to practice injury prevention. Making the most of these opportunities is a major public health challenge through the year 2000 and beyond. The result can be fewer injuries and deaths among children and youth.

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3. U.S. Consumer Product Safety Commission (CPSC). The poison prevention packaging act of 1970.

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13. Committee on Trauma Research, et al. Injury in America: A continuing public health problem. Washington, D. C.: National Academy of Sciences Press, 1985.

SELECTED ABSTRACTS ON PREVENTION OF INJURIES TO CHILDREN AND YOUTH

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HOUSEHOLD INJURIES

• BURNS AND FIRES

001
Firesafety Educator's Handbook: A Comprehensive Guide to Planning, Designing and Implementing Firesafety Programs.
Adams, R. C.
Quincy, MA. National Fire Protection Association, 180 p., 1983.

A comprehensive guide to planning, designing, and implementing firesafety programs is presented. This handbook is divided into six chapters. Chapter 1 focuses on gathering fire data and determining the firesafety messages. Chapter 2 describes methods of planning, developing, and implementing firesafety education programs. Chapter 3 discusses marketing issues and strategies involving six different types of target audiences: (1) preschoolers, (2) elementary school children, (3) adolescents, (4) adults, (5) the elderly, and (6) the handicapped. Chapter 4 provides information on funding sources and strategies, including foundations and government grants. Chapter 5 offers information and suggestions about various teaching materials and resources, including (1) posters, (2) brochures, (3) flyers, (4) films, (5) slide tapes, (6) fire-safety people and organizations, (7) fire-safety education catalogs, (8) resource materials, and (9) programs. Chapter 6 describes the use of the media (newspapers, radio, and television) as effective components of a fire-safety program.

002
Social Validation and Training of Emergency Fire Safety Skills for Potential Injury Prevention and Life Saving.
Jones, R. T.; Kazdin, A. E.; and Haney, J. I.
Journal of Applied Behavior Analysis 14(3):249-260, Fall 1981.

A multifaceted behavioral program designed to teach fire escape procedures to children was assessed at the Pittsburgh, Pennsylvania, public schools. Five third-grade children were assessed twice daily in four different emergency fire situations. The children were required to meet certain expectations designed to ensure escape without loss of life or injury before progressing to the next level. The results were evaluated in a multiple-baseline design. The children improved their performance substantially after training. A training package including instructions, shaping, modeling, rehearsal, feedback, and external and self reinforcement proved effective in training children how to escape fire emergencies. Children can be taught safety skills for emergency situations without requiring extensive training time. 36 references.

003
Emergency Fire-Safety Skills for Blind Children and Adolescents.
Jones, R. T.; Sisson, L. A.; and Van Hasselt, V. B.
Behavior Modification 8(2):267-286, April 1984.

Training group emergency fire-safety skills for blind children and adolescents aged 10 to 19 was tested at the Western Pennsylvania School for Blind Children. The procedure targeted skills that were required to exit from dormitories during a night-time fire. Training consisted of teaching the adolescents the proper actions to take in response to the sound of the fire alarm. Both simulated and in vivo drills were held. By the third session the target group mastered the entire sequence of prescribed behaviors and were able to maintain performance at that level. Group training was used effectively to train these blind adolescents. Specialized training of blind children in a variety of emergency safety skills is critically needed, especially given their vulnerability to accidents or emergency situations. 26 references.

004
Burns.
McLoughlin, E. and Crawford, J. D.
Pediatric Clinics of North America 32(1):61-75, February 1985.

In addition to smoke inhalation, there are six categories of burn injuries: flame, scald, contact, electrical, chemical, and ultraviolet radiation. Both the very young and the very old share a high risk of particular types of burn injuries because they both have less acute perception of danger and less control of environmental elements. Smoke detectors provide an early warning system while residential sprinklers protect those who are unable to respond to this early warning system. Other aspects of the flame burn injury are match play and juvenile fire-setting, the element of adult supervision, cigarettes, clothing ignition, and flammable liquids. Scalds usually are caused by tap water and kitchen scalds. Electrical burns most often affect children under 5 years of age with injuries to the hands and face. Fireworks are an example of a hazard that is responsive to legislative control. Emergency behaviors for burn victims include dropping and rolling, applying cool water immediately, and crawling under smoke to avoid asphyxiation. Pediatricians need to collect data on the factors involved in burn injuries, insist on evaluation, cooperate with fire departments, and become advocates for change. 66 references.

005
In Case of Fire.
Moir, J.
Instructor 93(3):106-108, 110, October 1983.

Students need to be taught that fire prevention is a year-long duty in which they can help to minimize the chances of fire and know what to do if a fire breaks out. Fire escape rules include taking the following actions: (1) escape rather than try to fight the fire, (2) stay low to avoid smoke and heat, (3) test the doors before opening them, (4) use the window as a last resort to escape if you are trapped above the first floor, (5) close doors to cut off air to the blaze, (6) alert others in the building, (7) call the fire department, and (8) do not reenter a burning building. Every school should have an emergency plan that will be effective when needed. Teachers should also instruct students about home fire safety and encourage them to share this information with other family members.

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HOUSEHOLD INJURIES

006

Age-Related Burn Injuries and Their Prevention.

Surveyer, J. A. and Halpern, J.

Pediatric Nursing 7(5):29-34, September-October 1981.

Because burn accidents occur in predictable patterns associated with a child's level of development, nurses must be aware of these patterns in order to counsel families about prevention. Predisposing factors like stress in the care giver's life and stressors in the child's life have been associated with childhood injuries. Children aged 0 to 2 years are at the greatest risk for kitchen or hot water scald injuries. Children aged 3 to 8 years often show a fascination with fire, matches, and lighters before they have the motor coordination and judgment to handle such dangerous items. Children aged 9 to 12 years often received flame burns due to the careless use of fire and flammable liquids. In the 9 to 13 year old group the developing adolescent is susceptible to work-related as well as domestic burn injuries. On the scene emergency care is necessary when a burn occurs. Transport to an emergency room is essential for all serious burns. Nurses can help assess at-risk situations and outline prevention measures for both adults and children. 9 references.

007

Evaluation of Group Well-Child Care for Improving Burn Prevention Practices in the Home.

Thomas, K. A.; Hassanein, R. S.; and Christophersen, E. R.

Pediatrics 74(5):879-882, November 1984.

A study of 58 couples, who had been randomly assigned to an experimental or a control group, was designed to give direction to the pediatrician who is interested in counseling parents on home safety. Both groups attended a well-child care class that lasted 90 minutes. Both groups received information on nutrition, dental care, safety in the car and home, child development, child rearing, illness management, and immunizations. In addition, the experimental group received information and discussion on burn prevention, specifically hot water heater settings and smoke detectors. After the class, a significant difference was found in the hot water temperatures in the homes of the two groups. The training did have an effect in making the experimental group more compliant with class recommendations. However, results were not significant regarding smoke detector use. The results suggest that primary health care providers can have an impact on fire safety practices in the home. 13 references.

008

Firesafety . . . For the Rest of Your Life: A Fire Safety Program for Secondary Schools.

Broderick, C.

National Fire Protection Association, Public Education Department. Batterymarch Park, Quincy, MA 02269

Funding Source: New York State Department of State, Albany. Office of Fire Prevention and Control; Foundation for Fire Safety, Rosslyn, VA.1983 - Continuing.

This fire safety program, developed for use in secondary schools, consists of 14 units, each emphasizing some aspect of fire safety. Also included are lists of teaching aids and resource materials. Unit topics include the following: (1) introduction, (2) understanding fire and arson, (3) personal protection from flames, (4) personal protection from smoke, (5) cigarettes, (6) home heating, (7) home cooking, (8) electricity, (9) flammable liquids, (10) internal combustion engines, (11) holiday fire safety, (12) outdoor fire safety, (13) arson, and (14) the fire service. The program is designed to be taught by school teachers, but successful implementation requires a commitment to fire safety education by administrators as well. Each unit addresses a specific fire safety problem, offers a solution to that problem, and provides knowledge, attitude, and behavioral objectives to achieve that solution. Teaching aids, suggested activities, and resource materials are also described.

009

Learn Not To Burn.

Broderick, C.National Fire Protection Association, Public Education Department, Batterymarch Park, Quincy, MA 02269

1979 - Continuing.

The Learn Not To Burn Curriculum is a fire prevention and safety education program for school children in kindergarten through eighth grade. The curriculum was developed by the National Fire Protection Association, in consultation with educators, fire-safety experts, and curriculum specialists. Learn Not To Burn features 25 key fire-safety skills that teach children to (1) prevent fires; (2) protect themselves, their families, and their friends from fire; and (3) persuade others to be mindful of fire safety. The 25 key skills are integrated into regular school subject areas. Each skill is outlined for the teacher in terms of three objectives: attitude, action, and knowledge. Components of the curriculum include (1) curriculum cards for each of the skills, (2) evaluation instruments, (3) fire-safety information for teachers, (4) a glossary of fire-related terms, and (5) a listing of selected teaching aids. The curriculum is divided into three levels: kindergarten through second grade, third through fifth grade, and sixth through eighth grade. It has been field-tested and is now used in thousands of classrooms throughout the country. The program is inexpensive to implement and it brings parents, the fire service, and the community into the educational process. Learn Not To Burn has been credited with saving at least 18 lives from fire-related injuries.

• EYE SAFETY

010

The Eyes Have It.

Maguire, L.

National Society to Prevent Blindness, 79 Madison Avenue, New York, NY 10016

Funding Source: American Legion-Child Welfare Fund, Indianapolis, IN.; New York State American Legion Auxiliary, New York.

March 1979 - Continuing.

The Eyes Have It is a program designed to provide eye health and eye safety education for kindergarten through third grade. Developed by the National Society to Prevent Blindness, the program consists of a musical sing along film, group activity packet, and parent information folder In addition to puzzles and games, supplemental projects are suggested: (1) emphasize the importance of sight by having students try to identify various objects while blindfolded; (2) dramatize situations that require caution, for example, showing the correct way to carry scissors; or (3) invite an eye professional to speak to the class about why some people wear eyeglasses. Program materials include an instructor's guide, activity sheet masters, games, puzzles, and film. The program is implemented by teachers and nurses, to be reinforced at home by parents. Objectives have been developed in the areas of students' health-related knowledge, attitudes, and behavior, as well as in the areas of student and teacher enthusiasm, and parental involvement.

011
The Magic of Sight.
Maguire, L.
National Society to Prevent Blindness 79 Madison Avenue, New York, NY 10016. Funding Source: The National Society to Prevent Blindness; American Legion Child Welfare Foundation, Inc.
Continuing.

The Magic of Sight is a multimedia program developed to present information on the eye by the National Society to Prevent Blindness. Designed according to surveys of the needs of teachers, students, and health specialists, its purpose is to inform students about the eye, general care of the eye, eye problems, ocular hazards to which this age range is increasingly exposed, and first aid procedures. The kit includes a 60-frame full-color filmstrip utilizing cartoon and archival artwork, with an accompanying 13-minute sound cassette, a wall chart of the eye, a folder further defining parts of the eye, prepared test sheets, a crossword puzzle, and a glue-on first aid sticker. Instructor's folder includes background information and supplementary suggested learning activities. The program is implemented by teachers. Program objectives have been developed in the areas of students' health-related knowledge, attitudes, behavior, self control, and enthusiasm. Subjective evidence of program effectiveness has been positive response from teachers.

012
An Option to See.
Maguire, L.
National Society to Prevent Blindness, 79 Madison Avenue, New York, NY 10016. Funding Source: The National Society to Prevent Blindness; Charles A. Dana Foundation.
Continuing.

An Option to See is an eye safety program developed by the National Society to Prevent Blindness. Its purpose is to educate students, particularly in lab and shop classes, to recognize potential classroom eye hazards and motivate them to use the appropriate safety eyewear. The program will help teachers implement their school eye safety programs and the school eye safety laws existing in 36 States. It includes a 17-minute, 16mm color-sound film, entitled, An Option to See, which uses an everyday classroom situation to present the key facts about eye safety and eye protection, dramatically showing how the use of safety eyewear helps to prevent serious injury to the eye. A set of teaching materials designed to reinforce the basic eye safety concepts presented in the film can be used to expand on the film or may be used independently. Program materials include an Educator's Resource Guide which contains duplicating masters, pretests, attitude surveys, first-aid information, quizzes, and a letter to parents (in English and Spanish); overhead transparencies to re-emphasize major concepts; a poster; a medicine cabinet first-aid sticker for eye emergencies; and a teacher's guide. Program objectives have been developed in the areas of student health-related knowledge, attitudes, behavior, self-control and enthusiasm. Subjective evidence of program effectiveness has included positive response from teachers, and program adoption by the Connecticut, Mississippi, and New Jersey State Departments of Education for all vocational and industrial arts classes in those States.

• GENERAL HOUSEHOLD INJURIES

013
A Project on Home Accidents.
Adair, D.; Charlton, A.; Flood, M.; Harris, E.; May, K.; Reader, L.; Robson, A.; and Thompson, J.
Health Visitor (London) 53(5):158-160, May 1980.

This project conducted by health visitor students at New College, Durham, England, was initiated in order to reduce home accidents and to involve student health visitors in small scale research. A survey on home accidents was administered to parents of 257 children under the age of 5 years. The completed surveys indicated numerous safety violations such as: (1) poisons and medicine in accessible locations; (2) giving infants pillows; (3) unsafe play areas with easy access to the street; and (4) unsafe heating systems, furniture, and staircases. The questionnaire design presented problems which made it difficult to gather detailed information on domestic accidents. The health visitor's role is to counsel the very old, as well as the very young, so that each generation may positively influence the other and development of related accidents may be avoided. The health visitor must be aware of the causes of accidents so that any potential dangers may be identified. 2 references.

014
Home Accidents: A Research Project.
Ahamed, M.
Nursing Times (Community Outlook) (London) p. 223, August 11, 1982.

The Preston Health District in England conducted research and developed a structured program to assist health visitors when advising mothers about safety in the home. A survey was conducted to identify areas of particular vulnerability for children ages 5 and under. The data collection instrument was administered to families with children who had been treated at the Preston Infirmary or Chorley and District Hospital over a 12 month period. Based on data analysis of the responses, checklists were developed for various developmental groups. The health visitors provided a general introduction to home safety topics or reinforced information that had been provided previously. While not enough time has elapsed to monitor the effectiveness of the project, a follow up study is planned.

015

Educating Parents About Injury Prevention.

Bass, J. L., Mehta, K. A.; Ostrovsky, M.; and Halperin, S. F.

Pediatric Clinics of North America 32(1):233-242, February 1985.

The Department of Pediatrics at Framingham Union Hospital in Massachusetts established the Pediatric Accident Prevention Project (PAPP) in 1979 to continue development of a system of parent education on childhood safety that could be used in the primary care setting. The project uses the Framingham Safety Surveys and a home safety demonstration board that contains drawer safety latches, ipecac syrup, outlet covers, shock stops, and a cabinet lock. Physicians and patients responded positively to the project. A small scale study evaluated the effect of PAPP activities. Homes that did not receive counseling were at significantly greater risk for unsafe storage of sharp objects and plastic bags in the kitchen. By completing the survey, parents take an active role and expect feedback from the physician. The individual needs of the parent are met and the physician is stimulated to talk to parents about at risk situations. Given the diversity of the childhood accident problem, physician counseling can only be expected to complement and reinforce other efforts to control accidents among children. 28 references.

016

Promoting Children's Home Safety (Letter).

Catford, J. C.; Hempsall, V.; and Nutbeam, D.

British Medical Journal (London) 285(6355):1658-1659, December 4, 1982.

The British Broadcasting Corporation (BBC) television campaign promoting children's home safety appears to be a useful health education approach, but the procedure for evaluating the program's effects was flawed. A study by Colver, et al. examined the effects of the BBC program "Play It Safe" with and without individual contact with a health educator. Because the study did not include a control group of subjects who received individual contact with a health visitor but did not view the television program, it failed to assess accurately the effectiveness of the television program. However, both the author of the study and his critics agree that the television program should be combined with individual contact with a health educator for maximum efficiency. Television health education campaigns in Britain have been criticized for pointing out danger without giving the specific information needed to reduce the danger. Home visits by health educators can provide specific information for avoiding or reducing health risks in a way that television has not yet attempted.

See also abstract nos. 162, 163, 195.

017

Home Accidents to Children in Preston Health District, 1979.

Chorley and South Ribble Health Authority, Fulwood (England).[S.l., s.n.], 19 p., [1979?].

Available from: Chorley and South Ribble HA, Watling St. Rd., Fulwood, Preston PR2 4DX, England.

The Preston Health District and Lancaster University in England initiated a joint project to collect and disseminate information that identifies areas where action may help reduce accidents to children 5 years of age and under. The purpose of this project was to help reduce demand on hospital facilities, establish the cost of accidents, and develop a pediatric information monitoring scheme for the Preston Health District. Between January 1, 1979 and December 30, 1979, a survey form was completed on every child 5 years of age and under who attended the Accident and Emergency Department at Preston Infirmary or Chorley and District Hospital after an accident. The survey found that 2-year-olds have the highest incidence of accidents for both sexes. Frequency of injury type varied within age groupings. The five most dangerous locations were living-dining room, kitchen, garden, bedroom, and stairs within the house. This local survey enabled health visitors to focus on the priorities of the district and design their services to help meet the local needs.

018

Nursing Mirror Community Forum. 2. Children in Danger: Accidents in the Home.

Cliff, K. and Li, H.

Nursing Mirror (Sussex) 156(7):i-viii, February 16, 1983.

A survey conducted in Southampton (England) General Hospital's accident and emergency department reports findings on the etiology of accidents, as well as on the parents' perceptions of dangerous areas in the home. It also notes whether parents have received safety counseling and advice on home accident prevention. A register was maintained on children 0-4 years old who attended the hospital as a result of an accident or other cause. Two questionnaires were sent to parents to obtain information on perceptions. Only 28 percent of the responding parents said they had received information on home accident prevention from health care professionals. Other methods of disseminating information such as television and poster displays were shown to be of value. It is concluded that health care professionals must help reduce the mortality and morbidity from children's accidents. Effective programs can be initiated with liaison between epidemiologists, health care professionals and health care educators. 5 references.

HOUSEHOLD INJURIES

019

Promoting Children's Home Safety.

Colver, A. F.; Hutchinson, P. J.; and Judson, E. C.

British Medical Journal (London) 285(6349):1177-1180, October 23, 1982.

Home accidents are the main cause of death and morbidity in early childhood, and working class children are at greatest risk. A study in an inner-city area of the effects of a (British) national television campaign about child accident prevention and a study of a locally designed health education initiative showed that 55 percent of the families with young children in the study area did not watch any of the television programs. Only 9 percent of a group specially encouraged to watch the program took any action to make their homes safer. In a comparable group which received a home visit by a health educator, 60 percent took action to make their homes safer. Before the television campaign, most families studied were aware of the importance and preventability of children's accidents. The problems disadvantaged families face are not ones of ignorance or apathy about hazards, but practical difficulties in converting their concern into action. Administrative arrangements must be developed for providing health workers, especially health visitors, with detailed local information to pass on to parents. 17 references.

020

Educating Mr. Punch — "Home Safety".

Crush, P. and Prince, R.

Royal Society of Health Journal (London) 102(4):158-161, August 1982.

Health education concepts can be taught to children using Punch and Judy puppet shows. Although home safety education is not a topic that is intrinsically interesting to children, practical visual examples of hazards in the home are easy to incorporate into such a script. Only a limited amount of information can be provided in a 20- or 30-minute show, but this vehicle can be used for pleasurable introduction to the subject. When a Punch and Judy show was featured at a British Housing and Home Safety Exhibition, it attracted large numbers of people to the exhibition, gave the parents the opportunity to study the exhibits free of their children, and offered some home safety lessons to the children. To use this format in a home safety education program, an experienced Punch and Judy show producer should be consulted, and a script specifically relevant to home safety education should be developed.

021

Home Safety: Is Anticipatory Guidance Effective?

Dershewitz, R. A.

In: Preventing Childhood Injuries: Report of the Twelfth Ross Roundtable on Critical Approaches to Common Pediatric Problems in Collaboration with the Ambulatory Pediatric Association. Bergman, A. B., ed. Columbus, OH, Ross Laboratories, p. 22-29, 1982.

Anticipatory guidance regarding safety in the home and its extensions is traditionally performed by the pediatrician or nurse practitioner and is directed at the child's mother. Health education has been effective when it has been directed against one behavior rather than trying to change many behaviors simultaneously. Desired actions occur when the safety message is continuous and modification of existing behavior is not required. Since the health care provider has limited time, alternate educational methods might involve the media, other professionals, or respected lay groups. Safety should be made a part of the child's school curriculum, with accident repeaters and their families being referred for counseling. The best means of accident prevention do not rely on human behavior, rather they are passive measures. Until more effective teaching methods are determined, practitioners should continue to provide anticipatory guidance to promote childhood safety. Intervention should be directed at the developmental age of the child and the injuries resulting in the greatest mortality and morbidity should be mentioned. 11 references.

022

Childhood Household Safety: An Overview.

Dershewitz, R. A. and Christophersen, E. R.

American Journal of Diseases of Children 138(1):85-88, January 1984.

Accidents are the leading cause of death for children between the ages of 1 and 14 years. Since every child is susceptible to accidents at home, it is necessary to pay particular attention to prevention techniques that focus on the family and the home. Injury control strategies can be either (1) active or (2) passive. The pediatrician should support both of these tactics. The active approach involves safety counseling. Its main problem is noncompliance by parents who do not heed the advice. The passive approach does not require continuous effort on the part of parents so it has been more successful. The theory behind passive approaches is that individuals cannot be taught or relied on to safety-proof their environment. Active and passive approaches are outlined for preventing childhood accidents from burns, strangulation and asphyxiation, drowning, falls, firearms, poisonings, outdoor activities, and toys. Most successful education programs have narrow goals that attempt to reduce one type of accident. The pediatrician is most often the health educator for parents. It is concluded that, whenever possible, emphasis should be on the passive approach with active measures being used as a supplement. 19 references.

023

A Home Injury Prevention Program for Children.

Gallagher, S. S.; Hunter, P.; and Guyer, B.

Pediatric Clinics of North America 32(1):95-112, February 1985.

The Massachusetts Statewide Childhood Injury Prevention Program developed and implemented the Home Injury Prevention Project (HIPP) that combines educational, regulatory, and technologic methods to reduce home injuries. Safety evaluations were conducted in order to reduce household hazards related to burns, poisonings, falls, choking, and consumer products. The target group included families with children under 6 years of age living in areas of substandard housing. A sanitary code inspection was carried out, education counseling was given to the parents, and a variety of safety devices were offered. A follow-up visit was made. In general, there was a 10 percent decline in hazards from the initial visit to the follow-up. The safety devices, which were provided free of charge, caused the most significant change. Hazardous items addressed in education were reduced from a mean score of 28 to 21 percent. HIPP demonstrated a reduction of household hazards by combining safety education and the installation of safety devices. This study shows the feasibility of having a local health department carry out injury prevention in conjunction with building inspections. Pediatricians can be extremely influential with patients and with the legislature in promoting home safety. 55 references.

See also abstract nos. 143, 144

024

Teaching Home Safety and Survival Skills to Latch-Key Children: A Comparison of Two Manuals and Methods.

Peterson, L.

Journal of Applied Behavioral Analysis 17(3):279-293, Fall 1984.

Two different methods of training latch-key children in home safety and survival skills were evaluated. Either the discussion oriented manual, entitled Prepared for Today, or the behaviorally oriented manual, entitled Safe at Home, were used to teach safety skills to children between the ages of 8-10 years. Both groups were trained in an 8-week sequence and at one follow-up session 5 months later, with sessions ranging from 20 to 90 minutes. Children were tested in a room that was introduced as a life-sized "pretend house" where they could demonstrate their responses to different situations that might occur after school when they were home alone. In addition, children were asked a series of questions to assess the emotional side of the training. Results showed that children receiving the behavioral training consistently demonstrated a higher number of optimal behaviors. However, they did not uniformly reach 100 percent correct responses following training. Little benefit was seen for either training method on areas where the child had not received explicit training. Future research is needed to assess the limitations of the behavioral methods of teaching latch-key children safety training. 25 references.

025

The "Safe at Home" Game. Training Comprehensive Prevention Skills in Latchkey Children.

Peterson, L.

Behavior Modification 8(4):474-494, October 1984.

An intervention technique was designed to train latchkey children in three major areas of parental concern: (1) providing training in making appropriate responses during emergencies, (2) encountering strangers, and (3) safe daily habits after school. Eight children 8 to 9 years old who were left unsupervised occasionally took part in the training. The subjects played the Safe at Home game that allowed them to discriminate correct from incorrect responses to emergencies and strangers. The results indicate that the children showed acceptable levels of selecting snacks and after school activities, but inadequate responses to responding to strangers. After 16 training sessions the children responded to all training areas at near optimal levels. At the 1-year follow-up, the children still showed optimal responses to selecting snacks and after school activities but not optimal responses to encountering strangers. The Safe at Home game can effect a large number of changes in a high-risk group of children in a small amount of time. 20 references.

026

Home Safety: Development and Validation of One Component of an Ecobehavioral Treatment Program for Abused and Neglected Children.

Tertinger, D. A.; Greene, B. F.; and Lutzker, J. R.

Journal of Applied Behavior Analysis 17(2):159-174, Summer 1984.

A Home Accident Prevention Inventory (HAPI) was developed and validated to assess hazards in the homes of six families living in rural southern Illinois under State protective service for child abuse. Child neglect is often documented when caseworkers observe that the family's home itself is so poorly kept that it presents an environment in which young children have ready access to lethal hazards such as poisons, uncovered wall outlets, and firearms. The HAPI covered five categories of hazards: (1) fire and electrical, (2) mechanical-suffocation, (3) ingested object suffocation, (4) firearms, and (5) solid-liquid poisons. Following the collection of baseline data, parents were presented with a treatment package that included instructions and demonstrations on making hazards inaccessible to children, plus feedback regarding the number and location of hazards in the home. The multiple-baseline design across hazardous categories in each family's home showed that the package resulted in decreases in the number of these accessible hazards. These improvements were maintained over an extended period of unannounced followup checks. This research provides a model for the development and assessment of an area previously unexamined in the child abuse and neglect literature. Future efforts can streamline treatment techniques to produce more results, and longitudinal data should be gathered from large populations to test the effectiveness of the home accident prevention program. 5 references.

• POISON PREVENTION

027

A Controlled Field Trial of a Poisoning Prevention Method.

Fergusson, D. M.; Horwood, L. J.; Beautrais, A. L.; and Shannon, F. T.

Pediatrics 69(5):515-520, May 1982.

The Christchurch Child Development Study of the Christchurch Clinical School of Medicine in New Zealand developed a controlled field trial on families with 3 year old children to determine the effectiveness of Mr. Yuk labels in poison prevention. Mothers of the experimental group children were given instructional materials and the Mr. Yuk stickers. Data was collected on each child's history of poisoning and on each family's poison storage methods. The findings of the study did not support the belief that Mr. Yuk stickers were useful preventive measures for children aged 2 to 3 years. A higher poisoning prevalence in this sample indicated that being introduced to the program did not significantly alter the families sensitivity to the risk of poisoning. The 2 to 3 year age period is a time of high risk for accidental poisoning. Poison prevention techniques should cater to the needs of this age group. Simply supplying Mr. Yuk stickers to families is not sufficient. It is possible that integrating label use with an educational campaign could be effective. 11 references.

028

Medicine Messages: A Programme for Year Four Students.

Health Education Unit, Perth (Australia) and Rotary Club of Gosnells (Australia).

Perth, [Western Australia], the Unit, [14] p., [19 —].

The Rotary Club of Gosnells and the Health Education Unit, Perth, Australia, developed a campaign on the proper use of medication. The target audience consisted of fourth grade students. The program sought to teach students that the proper use of medicine involves care with distribution, storage, and dosage. Posters, teacher notes, curriculum guides, worksheets, and workcards were provided. Activities such as developing lists, class discussions, and role playing, were used to help children learn the four lessons. This program was part of a campaign to promote public awareness about using prescription and over-the-counter drugs correctly. Schools worked with local communities to achieve this goal.

029

Poison Prevention for the Visually Impaired.

Monsma, L. J.

Veterinary and Human Toxicology 22(1):13-15, February 1980.

The Western Michigan Poison Center developed a poison prevention program especially for visually impaired parents and children. Parents of ten visually handicapped children and six visually impaired parents were interviewed. The most effective principle these people followed was to keep poisons out of reach. The Officer Ugg poison prevention program was modified to use tactile markings rather than stickers to identify poisons for a group of preschool children. Evaluation showed that this program was adequately presented and well received. This study indicates that the same techniques used by those with normal sight can be used by the visually impaired if slight modifications are made. With planning, the visually impaired can be included in poison prevention programs.

030

Poison Awareness: A Resource Book for Teachers. Grades 7-9.

National Evaluation Systems, Inc., Amherst, Mass.Washington, DC, U.S. Consumer Product Safety Commission, Office of Communications, 61 p., 19-.

Available from: GPO.

Resource guidelines for teachers who wish to offer their students poison awareness courses are presented. The ideal course will (1) increase students' knowledge of the hazards associated with poisonous household products; (2) inform students about hazards specifically associated with ammonia products; and (3) educate students in the proper use, storage, and disposal of potential poisons in the home. Topics receiving attention include course preparation, means of assessing the needs and interests of the students, content background for teaching poison prevention, and activities in poison prevention. An annotated list of materials on poison and poison prevention is appended.

031

A Poison Education Program for Primary Schools.

Sketris, I. S.; Gillis, C.; MacNeil, T.; Anderson, J. P.; and Thiebaux, H. J.

Veterinary and Human Toxicology 26(3):205-207, June 1984.

Because poisoning is a significant health care problem in Canada the College of Pharmacy, Dalhousie University and the Poison Control Centre at the Izaak Walton Killam Hospital for Children developed a poison education curriculum for teachers of grades one and two. Each 30-minute lesson dealt with one of the following topics: (1) identifying poison and hazard symbols, (2) learning where poisons should be stored, and (3) learning to recognize a poisoning and to contact an adult or the local poison control center. Parents of the students received an information kit on poison prevention. Results of the pre- and posttests of the approximately 400 children who received the program suggest that children in grades one and two can be taught effectively about poisoning, hazard symbols, and the poison control center. Children had difficulty identifying poisons but they did have a general awareness of the potential dangers of unknown products and their storage. When asked to identify their source of knowledge about poisons, children cited parents, television, and school as their most important sources. Future studies are needed to determine the effectiveness of the program to train a child to call the poison control center if a poisoning does take place. 14 references.

032
Poisonings.
Steele, P. and Spyker, D. A.
Pediatric Clinics of North America 32(1):77-86, February 1985.

Three projects conducted in California, Massachusetts, and Virginia through funding from the Office of Maternal and Child Health, Bureau of Community Health Services, were examined in order to focus on findings that apply to the epidemiology of poisoning. The project group in each State gathered epidemiological data through the use of surveys. Massachusetts focused on children under the age of 20, California targeted children ages 0 to 14 years, and Virginia surveyed parents of children 1 to 3 years of age. Records were also studied in each State for calls made to poison control centers and research was conducted on emergency department visits. The basic framework of prevention utilized a systems approach. Virginia used one-to-one education. California implemented a community-wide program. Massachusetts used several approaches to provide professional and public education programs on poisoning prevention. These three demonstration programs did not document a major impact on preventing poisoning; however, they did provide a basis for selected strategies that may have widespread application. 16 references.

033
Poison Prevention Education.
Temple, A. R.
Pediatrics 74(5,Pt. 2):964-969, November 1984.

Physicians can significantly decrease the frequency and severity of poisoning by educating parents and families in poison prevention. Parents should be taught immediate first-aid steps, such as initiating basic life-support measures and irrigation [illegible] dilution, that can be taken before seeking medical assistance. Other actions, such as inducing emesis, require medical supervision. The poison control center is the best sources for information and advice on treating poisoning. In order to decrease the frequency of poisoning, parents should be taught to purchase, store, and handle potentially toxic products appropriately. The purchase of child-resistant safety packaged drugs and chemicals should be encouraged. The phone number of the local poison control center should be posted on each telephone. In addition, parents should be able to initiate first-aid measures and keep syrup of ipecac on hand. Ideally, the physician should establish a preventive education schedule and discuss poison prevention with parents at regular well-child visits, beginning when the child is very young. 12 references.

034
The Deterrent Effect of Poison-Warning Stickers.
Vernberg, K.; Culver-Dickinson, P.; and Spyker, D. A.
American Journal of Diseases of Children 138(11):1018-1020, November 1984.

Researchers examined the effect of poison warning stickers on toddler behavior before and after an education program. The target audience consisted of 20 children aged 12 to 30 months who were randomly assigned to a control or experimental group. During the first 5-minute session all the children were observed in a room containing 10 pairs of containers, 5 of which were labeled with Mr. Yuk stickers. Manipulations of the labeled and unlabeled containers were recorded. There was no statistical preference for either type of container in either the control or experimental group. The experimental group then received 5 minutes of instruction about the meaning of Mr. Yuk stickers. Training continued until the child could communicate that Mr. Yuk meant "no." A second session was then held where both groups could freely play with the containers on the floor. Results indicated that in the second session the experimental group showed a preference for Mr. Yuk labeled containers while the control group showed no preference. These findings suggested that labeling with Mr. Yuk does not deter toddlers from manipulating containers. In fact, these stickers may attract the child. Recommendations include keeping poisons up and out of reach and using safety closures rather than getting a false sense of security from the use of stickers. In addition, poison warning stickers should be placed on each telephone so that the poison center telephone number will be readily available. 13 references.

035
National Poison Prevention Week.
Gladden, M.
National Safety Council, 444 N. Michigan Avenue, Chicago, IL 60611
1962 - Continuing.

Under the auspices of the Poison Prevention Week Council, the National Safety Council promoted March 17-23 as the National Poison Prevention Week of 1985. The theme of the week, Children Act Fast...So Do Poisons, provides an opportunity for local communities to emphasize the dangers of accidental poisonings and to take appropriate actions. Activities planned for this week were designed to stress the fact that parents must be especially careful when household chemicals or drugs are being used. It takes only a few moments for an unsupervised child to open a product. The council provides responses to often asked questions regarding the different types of poisonings, treatment, and preventive strategies. Press releases, radio spots, brochures, posters, and a Consumer Product Safety Checklist were included in a packet of materials for use in educational activities.

036
Poison Education Program.
Chase, P.
Houlton Regional Hospital, 20 Hartford Street, Houlton, ME 04730
Funding Source: Maine Poison Control Center, Augusta, ME; Roxanne Labs, Columbus, OH; Maine Dept of Human Services, Augusta, ME.
1982 - Continuing.

This program reaches those persons associated with young children and educates them on how to (1) poison proof their homes, (2) handle a poison, (3) identify poisonous plants, and (4) use the poison control kit distributed to them. The poison kits are given to parents who leave the hospital after delivering a child and those who accompany a child who has taken a poison to the emergency room. Children in the sixth grade who are potential babysitters also receive the kit. The kit includes the poison control telephone number, a checklist to help poison proof the home, illustrations and literature of poisonous plants, and a coloring book for young children depicting Peter the poison proofer. Volunteers for the project give lectures, coordinate the program, and prepare the literature for distribution. Local support is given in the form of free air time by radio stations, and by McDonalds whose personnel distribute the poison control number on food trays. Over 32 of the State's hospitals (76 percent) are participating in the program. One participating hospital performed a quantitative evaluation of the learning objectives for the lectures to young schoolchildren, and found that 99 percent of the children know what to do in case of poisoning. Evaluations demonstrate that the program can be effective on a shoestring budget. Computerization of the records of the Poison Control Center will provide statistical information on the effectiveness of the program.

037

Poison Education Program.

Fortin, M. and Chase, P.

Houlton Regional Hospital, 20 Hartford Street, Houlton, ME 04730

Funding Source: Roxanne Labs, Columbus, OH; Maine State Dept. of Human Services, Augusta. Division of Child and Maternal Health.

1978 - Continuing.

The Poison Education Program of the Houlton Regional Hospital, in Houlton, Maine, is designed to identify and reach high-risk groups and to make them aware of the dangers of accidental poisoning. High-risk groups of particular concern to the project are new parents, parents of a child who has been poisoned once, school children, and babysitters. Specific strategies have been designed to reach each of these groups. Volunteers from the hospital pharmacies in the State of Maine are responsible for coordinating the programs locally, and hospital auxiliaries assist with the scheduling. The Maine Poison Control Center provides backup assistance and information on poisonings in the State. Private businesses have lent support to the efforts statewide. Three-fourths of Maine's hospitals participated during the first year of the program.

038

Poison Prevention Program.

Smith, J.

Youth Bridge, Inc., P.O. Box 668, Fayetteville, AR 72702.

1984 - Continuing.

There was no poison prevention program for younger children in Benton and Washington Counties in northwest Arkansas until Youth Bridge, Inc., initiated this project. The focus is on educating children aged 4 to 9 years about toxic agents, the dangers of playing with alcohol and medicines, and how to avoid accidents with toxic agents. The program seeks to (1) focus on decision-making skill building for 250 children in nursery or church school programs regarding poisons, medications, and other drug alcohol substances; (2) promote family participation in the skill building process; and (3) gather evaluation data from 20 percent of the participants' parents regarding their children's progress. Volunteers from the child development, social work, and education departments at the University of Arkansas dressed as clowns make presentations which include skits, storytelling, and group discussions to groups of children in nursery schools or church Sunday school programs. Children also receive badges, poison prevention stickers, and a factsheet for parents. Emphasis is placed on healthfulness and responsibility in decision making. A community Advisory Committee helped develop the program's content. Evaluations revealed that all objectives mentioned have been achieved: 98 percent of participants' parents believed the children had gained responsible decision-making skills involving toxic agents, medications, and other drug and alcohol substances and 85 percent of the parents reported discussing the presentation with their children at home. Due to the program's success, it has been incorporated into an ongoing service format with a professional magician and clown now volunteering their efforts. Youth Bridge is now compiling a videotape of the sessions and television publicity.

039

Poison Prevention Program.

Dunahew, A.

Cary Medical Center, Van Buren Road, Caribou, ME 04736

1982 - Continuing.

The Cary Medical Center in Caribou, Maine, administers a poison prevention program directed by the hospital pharmacist. An important part of this program is a child poison prevention kit which was prepared by the pharmacist with the help of the Volunteer Services, the Hospital Auxiliary, and the hospital's Emergency Department. Every parent coming to the hospital's emergency room with a suspected case of child poisoning is given information supplied by the Maine Poison Control Center on poison-proofing the home, how to deal with a suspected poisoning, and other information on poisons. The kit also contains a coupon for a single dosage of Ipecac Syrup, an emetic. The hospital's pharmacist, visiting schools in the area, works with second-grade children to develop their role in preventing poisoning of younger brothers and sisters in the home. The unique approach used by the pharmacist is to make the children poison-proofing detectives. The school program focuses on awareness and provides a home poison safety quiz that the children may take home to their parents to get the entire family involved.

040
Project Poison Prevention.
Kuper, D.
McKennan Poison Center, 800 E. 21st Street, P.O. Box 5045, Sioux Falls, SD 57117-5045.
March 1985.

During National Poison Prevention Week, March 17 to 23, 1985, and the McKennan Poison Center Prevention Week, March 17 to 23, 1985, the McKennan Poison Center (Sioux Falls, South Dakota) sponsored a statewide project centered around the theme "Protect Your Children and Grandchildren from Poisoning." The target audience for the promotion was South Dakota parents and grandparents of children ages 3 to 5 years. The McKennan Poison Center, through its affiliate hospitals, solicited the support of all the pharmacies in the State of South Dakota for their campaign. The goals of the project were (1) to decrease the frequency of poisonings, (2) to decrease the severity of poisonings, and (3) to enhance general awareness of potential poisoning problems. The central idea of the campaign was to encourage people to clean out their medicine cabinets of unneeded and outdated medications. Individuals who turned in their old, unused medications to their local pharmacy for disposal received a free bottle of syrup of ipecac. Over 120 pharmacies in 53 cities responded to the promotion. McKennan Poison Center provided 2,500 bottles of syrup of ipecac free, along with 3,500 brochures and poison stickers, 4,000 coloring books, and 60 display posters. Replication of the project annually is planned.

• TOY SAFETY

041
Toy Safety — United States, 1983.
MMWR. Center for Disease Control Morbidity and Mortality Weekly Report 33(50):697, December 21, 1984.

The Consumer Product Safety Commission (CPSC) estimated that 594,100 toy-related injuries were treated in U.S. hospital emergency rooms in 1983. This is a slight decrease from the 1982 statistics. Sixteen children died. Most injuries were caused by impact with toys, while choking from ingestion of small toys or parts of toys was the second most frequently reported accident. These incidents often involved children who were not of an appropriate age to use the toy; frequently parts of the toys were ingested or put into the ear, nose, or mouth. Investigations were conducted of toy manufacturers, importers, and distributors and by collecting samples of suspected unsafe toys. CPSC recalled approximately 39 toys and 11 other children's articles between October 1, 1983 and September 30, 1984. The CPSC and the Toy Manufacturers of America have developed guidelines for selecting and using safe toys. CPSC has a toll-free telephone number (800-638-2772) for consumers to call to ask questions, request information, or file complaints.

042
Monroe County, New York, Toy Safety Program.
Van Buren, J.
American Journal of Public Health 74(12):1418, December 1984.

Monroe County, New York, instituted the Toy Safety Program in 1971 to prevent toy-related injuries among children. Volunteers are assembled and oriented in October to monitor stores for hazardous toys. At the same time retailers of toy products are invited to attend a meeting where they are encouraged to publicize toy safety information in newspaper ads or other advertising outlets. They are also alerted to potentially hazardous toys before they purchase stock for the next Christmas holiday season. News media provide coverage of these events in local broadcasts and newspapers. To evaluate the effectiveness of this effort, an injury collection system is used to collect information on all accidental injuries treated in the emergency rooms of the two largest trauma centers in the county. Since the program was established, there has been a gradual decrease in toy-related injuries. There appears to be a strong association between the reduction of these injuries and the Toy Safety Program.

• ALCOHOL AND DRIVING

043
Safetyrama: Teaching Children About DWI.
Cipullo, E. J.
Children Today 13(5):24-26, September-October 1984.

Safetyrama is a program designed to educate children in kindergarten through grade 2 on traffic safety and the effects of driving while intoxicated (DWI). The DWI portion of the instruction is presented over two or three days. During the course, a storybook is used to teach the lesson that drinking and driving do not mix. The story emphasizes the negative effects of alcohol on judgment and physical movement. The course also involves role playing on a course assembled in the classroom. A discussion about the effects of drunk driving and why it is against the law is followed by giving the students a small fuzzy toy safety pet that they can put on their bikes or on the dashboard of their parents' car. The premise of the course is that children are impressionable, receptive, and persuasive, so they can be made aware of the seriousness of DWI at an early age.

044
Road Safety. Perceptions of Final-Year Secondary-School Students.
Freebody, P. and Connor, B. H.
Medical Journal of Australia (Sydney) 141(12-13):815-817, December 8-22, 1984.

Twelfth-grade students in Australia were surveyed to assess their knowledge and opinions regarding road safety and drinking and driving. Students from seven schools completed a questionnaire. Results show that (1) most students are aware of the basic drinking and driving facts and pertinent laws; (2) many students favor a sliding scale of blood alcohol limits for drivers of differing experience levels; (3) the potential importance of schools in road-safety education is acknowledged; (4) many young people accurately perceive the causes of fatal road accidents but they do not perceive ways of minimizing the effects of the causes; (5) students generally support random breath testing; and (6) students fall into four groups with respect to their orientation to road safety. These four groups are (1) positivists — those who believed that all suggestions in the survey were worthwhile, (2) negativists — those who believed that none of the suggestions were worthwhile, (3) enforcers — those who preferred the enforcement of stricter penalties rather than endorsing an increase in the minimum driving age or educational programs, and (4) educationalists — those who favored only driver training and safety education in schools as solutions to the problem of road safety. Recommendations include continuing road safety education at the information level, considering a sliding scale of legal blood alcohol limits, making road safety education a part of the curriculum, and keeping in mind the diversity of individuals' opinions concerning driving behavior. 12 references.

045
Alcohol Safety Education Project.
Barnes, S. E.
University of Southern Mississippi, Southern Station, Box 5122, Hattiesburg, MS 39406.
Funding Source: Governor's Highway Safety Program.
Continuing.

The major focus of this program includes a 1-hour teacher inservice program presented to fourth- and fifth-grade teachers. This program focuses on the topic of alcohol and its effects on the body. The relationship between alcohol and highway accidents is presented. The CHUG: Elementary Alcohol Education Program by Film Loops Incorporated is used as the major resource from which teachers provide their classroom program. The inclass program is usually conducted over 6 days for a total teaching time of 3 hours. Material includes the CHUG: Elementary Alcohol Education Program and other teaching and resource materials directed toward the alcohol-related highway accident problem in Mississippi. Initial costs involve the costs of the CHUG kits. The program is implemented by classroom teachers. Results of an evaluation conducted during the 1982-83 school year are available upon request.

046
Greeneville-Greene County Youth Alcohol Highway Safety Pilot Project.
Kidd, T.
P.O. Box 683, Greeneville, TN 37744.
Funding Source: Tennessee State Dept. of Mental Health and Mental Retardation, Nashville. Div. of Alcohol and Drug Abuse Services.
December 1983 - Continuing.

The Greeneville-Greene County community operates one of four Tennessee Youth Alcohol Highway Safety Pilot Projects authorized by the Tennessee Department of Mental Health and Mental Retardation, Division of Alcohol and Drug Abuse Services with seed money from the National Highway and Transportation Safety Administration. The project is a community effort that includes the Greene County Commission, Greeneville-Greene County Health Department, Nolachuckey Mental Health Center, Greene County Sheriff's Department, Greeneville City Police Department, Greeneville-Greene County School System, and Juvenile Court. The major goal is to reduce alcohol-related traffic fatalities among the teenage population of Greene County. The program is targeted at adolescents aged 13 to 18 and focuses on five components: (1) public education and communication, (2) a youth action group that works to develop alternatives to teenage drinking and driving, (3) an alcohol safety education program for teenagers who have been convicted of an alcohol-related offense, (4) deterrence methods promoting a community atmosphere in which teenage alcohol use is not tolerated, and (5) evaluation of the effectiveness of various program strategies. Objectives for each of the program components closely parallel the 1990 Objectives for the Nation. Preliminary evaluation results indicate that objectives within each program component are being accomplished.

047

Operation Graduation 1985.

Leavitt, C.
Utah Broadcasters Association, KTVX Channel 4 Television, 1760 Fremont Drive, Salt Lake City, UT 84104.
February 1985 - Continuing.

The Utah Broadcasters Association initiated the Operation Graduation program in response to abundant evidence that young Americans are at especially great risk of death or injury from accidents caused by drunk driving on graduation night. The program is based on the National Association of Broadcasters' Operation Prom and Graduation program and has the specific goal of reducing of the number of alcohol-related traffic accidents, deaths, and "driving under the influence" arrests among Utah teens. In addition, the program seeks to promote awareness among young people of the dangers and ramifications of alcohol and drug misuse. The Utah program includes (1) a dial-a-ride program, (2) a speakers bureau, (3) a pledge card and discount program sponsored by members of the Utah Restaurant Association, (4) public service announcements on radio and television, (5) public affairs programming on radio and television, and (6) a major public education campaign throughout the State. The program involved the cooperation and participation of many community groups and individuals. Both the public information and the service aspects of Operation Graduation 1985 were remarkably successful. There were no fatalities or serious injuries involving drunk driving among Utah graduating seniors in 1985. The large-scale campaign will be repeated in 1986.

048

Project Graduation.

Gubitosi, K.
National Highway Traffic Safety Administration, Traffic Safety Programs, NTS-01, 400 Seventh Street, SW, Washington, DC 20590.
1984 - Continuing.

Project Graduation, a program that originated through the efforts of the Oxford Hills community in Maine in 1980, sponsors a chemical-free graduation celebration for high school students. Partial funding for this project was provided by the National Highway Traffic Safety Administration (NHTSA). After identifying this as a successful program NHTSA held a conference in 1984 to promote the project nationally. NHTSA now disseminates Project Graduation materials and provides workshops, technical assistance, and speakers. Manuals are currently being designed to aid in implementing the program, and they should be available in the spring of 1986. The Project relies on student, parent, and community involvement to plan and produce graduation festivities. Previous parties have included hot air ballooning, feature films, concerts, all-night boat cruises, ice cream smorgasbords, etc. In 1984, 34 States had at least one Project Graduation site, and by May 1985, 19 States had designated a coordinator at the State level.

See also abstract no. 049

049

Project Graduation.

Mowatt, C.
Maine Department of Educational and Cultural Services, Division of Alcohol and Drug Education Services, Bureau of Instruction, Stevens School, State House, Station 57, Augusta, ME 04333
1980 - Continuing.

This is a statewide, school-based program, whose goal is to prevent death associated with drinking, drug taking, and driving during commencement season. On graduation night, an alcohol free party is planned for the graduates. During the entire commencement season, local schools and community groups campaign through newspapers, television, and radio against drinking. In addition, safety films are circulated in the schools, and pamphlets and handouts are distributed to encourage participation. A conference for school superintendents on how to give an alcohol free party was conducted by the Division of Alcohol and Drug Education Services. Attending participants represented 39 school districts. A panel discussion on drinking and driving issues was aired on a local television station. The 86 participating schools in 1983 are listed. All high school principals in the State were asked to complete a questionnaire concerning their schools' involvement in the program. In 1981 when the program began promotional activities, 12 schools participated. That number had grown to 86 by 1983. Other criteria used to evaluate the program's success were the number of fatal accidents reported for the period May 15-June 30. The results of the data are stated graphically. A dramatic decrease in both highway accidents and fatalities since inception of the program has occurred for high school students in Maine. For the period from May 15th through June 30th, the number of accidents decreased from 8 in 1980 to 0 in 1983, and fatalities decreased from 7 to 0. Oregon and Maryland have adopted the program; 20 other States have inquired about its details. The project has become a new tradition in Maine, and proms and other special activities are alcohol-free.

See also abstract no. 048

050

Safe Graduation Program.

Kleisinger, G. J.
Saskatchewan Dept. Education, Saskatchewan Safe Graduation Committee, 2220 College Avenue, Regina, Saskatchewan, Canada S4P 3V7
1979 - Continuing.

The Safe Graduation Program teaches high school students in the Province of Saskatchewan, Canada, to display responsible behavior in conjunction with celebrations. Special emphasis is placed on safety at graduation time. Seminars, networking, cooperative programming, and liaison between school and community are used to assist students in planning graduations in a way that minimizes the risk of alcohol related accidents. Saskatchewan educators, police, medical associations, insurance agents, and the safety and alcoholism commissions all act as sponsors of this program. Students attend a provincial seminar and then return to their communities to organize and implement a safe graduation program. Surveys and accident statistics indicate that the program has been a success. In addition, students learn to take an active role in organizing the program; they display leadership and organization skills and they learn to work with police, parents, and community leaders in organizing student celebrations.

051
So You Think You Can Drink and Drive.
Sutkus, J.
National Safety Council, 444 N. Michigan Avenue, Chicago, IL 60611
1984 - Continuing.

The National Safety Council developed the So You Think You Can Drink and Drive program to help teenagers understand the physical and psychological effects of alcohol on their driving. The program consists of a movie and questionnaires, as well as a list of resources for further alcohol-related information. The 22-minute film shows how alcohol consumption increases the likelihood of a motor vehicle accident. A questionnaire is provided to pre- and posttest the effectiveness of the movie. A postmovie discussion is used to develop a dialogue on how drinking changes driving abilities. The program kit includes a press release, information on organizing a public information campaign, and a program outline for instructors. The goal of the program is to make students form personally acceptable alternatives to socially pressured situations involving alcohol and driving. 7 references.

052
Students Against Driving Drunk (SADD).
Anastas, R.
P.O. Box 800, Marlboro, MA 01752
1981 - Continuing.

Since its inception in 1981, Students Against Drunk Drivers (SADD) has worked to (1) eliminate the drunk driver, (2) alert high school students of the dangers of drinking and driving, (3) conduct community awareness programs, and (4) organize peer counseling programs to help other students who are concerned about alcohol. Implementation of the program includes using the SADD curriculum in high schools and establishing local chapters of the group. In addition, a student-parent contract and a party guide involve getting the support of both teens and their parents to help combat drunk driving. The third initiative centers on developing a community awareness program. The SADD Chapter Handbook and Curriculum guide provide a detailed outline for achieving the group's goals, as well as visual aids for use in the classroom and in the community. This program is the first of its kind to help students, parents, and the community to combat the drinking-driving issue. SADD has grown from a single chapter into a national program. In addition to the curriculum guide, custom-made products are available for purchase. The group works with the goal of having no teenage alcohol-related deaths on our highways.

• BICYCLE SAFETY

053
Bicycle Accidents in Childhood. Social and Preventive Aspects.
Bouvier, R.
Australian Family Physician (Sydney) 13(4):287-289, April 1984.

General practitioners can help prevent childhood accidents by taking an active interest in the social and preventive aspects of bicycle accidents. In Australia, bicycle accidents are increasing while preventive measures are helping to reduce mortality from most other types of injury. Injuries in cycling accidents typically occur to the head or face. Head injuries are the most common cause of death while fractures are the most common inpatient morbidity. The use of bicycles has increased with more adults commuting to work by bicycle and with the increased interest in competition cycling (BMX- bicycle moto-cross) among children. Accident prevention can be facilitated by relying on the "three E's" — engineering, enforcement, and education — when investigating bicycle accidents to discover factors about the rider, the machine, and the environment that contribute to injuries. General practitioners who are treating injured children can discover contributory factors when taking history and then counsel the patient or parents on prevention. General practitioners should apply their accident prevention knowledge to their practice and their community. 3 references.

054
Reducing the Accident Toll Among Young Bicyclists.
Ernster, J. and Gross, R. H.
Journal — Oklahoma State Medical Association 75(12):397-402, December 1982.

A study team monitored emergency room records from a large metropolitan pediatric hospital and a suburban community hospital from April through October 1980 in order to determine the magnitude and character of bicycle injuries in the Oklahoma City (Oklahoma) area. A total of 85 bicycle related injuries and one fatality were evaluated. Sixty percent of the injuries occurred to children from 5 to 10 years of age, with lacerations requiring sutures being the most common type. Severity of injury was not significantly related to age, history of bike education, or frequency of bike use. Accidents occurred in the afternoon hours, usually involved males, and the accident victims were riding new or borrowed bikes and rode more than 1 hour a day. Spoke injury was correlated with riding double. Educational efforts, effective road design, bicycle design, and law enforcement can contribute to reducing the hazard of bicycle accidents involving children. 20 references.

055

Bicycle Safety Program.

Volatile, D.

National Safety Council, 444 N. Michigan Avenue, Chicago, IL 60611

1970 - Continuing.

The National Safety Council has developed instructional materials for use in bicycle safety programs. Cyclists are especially vulnerable in traffic because their vehicle offers little visibility and no protection. It is predicted that 105 million bicycles will be in use in the U.S. in 1985, suggesting that more than 47 percent of the U.S. population will be bicycle drivers. The Bicycle Driver's Test can increase awareness and understanding of the rules of the road. Parents or teachers can administer the quiz and review the correct answers with the students. The Bike Book provides assistance on choosing the right bicycle for the child, gives tips on maintaining the bicycle, and lists safety rules of the road and bicyle use. The Bicycle Safety Maintenance Manual, designed for adult use, details the components of a bicycle inspection program. While the manual and check list are important for groups performing the inspections, they are also valuable for family or individual bicycle owners. In order to maintain the level of efficiency and safety engineered into any vehicle, it must be properly maintained and serviced. In addition, knowing the rules of the road is important and adhering to those rules is vital.

• DRIVING SAFETY

056

Supplemental Driver Safety Program Development Final Report: Vol. 1. Developmental Research and Evaluation.

McPherson, K.; McKnight, A. J.; and Weidman, J. R.

Alexandria VA, National Public Services Research Institute (DOT HS 806 471), 125 p., February 1983.

Available from: NTIS; Order No. PB84-13648 0.

The National Public Services Research Institute designed instructional modules to supplement driver education experiences for young drivers 16 to 18 years old. This report describes the preparation and evaluation of these modules. Project work focused on five areas that were determined to be critical to safe and efficient driving: (1) alcohol, (2) speed, (3) restraint use, (4) hazard preparation, and (5) fuel efficiency. The initial effort involved identifying instructional objectives appropriate to each content area. This was accomplished through a comprehensive analysis of research data and through testing subjects. The study also identified delivery systems capable of supplementing driver education courses. Ten instructional modules were developed — three on alcohol, four on restraint usage, and one in each of the other content areas. The general approach taken was to place greater emphasis on providing students with experience in the behavior sought, and to place less reliance on the delivery of information to the students. Modules included use of role playing, films, prepared scenarios, actually experiencing violent vehicle maneuvers, slide tape programs, testimonials, crash simulation, and testing. Modules were evaluated for their effectiveness. Tests indicated that the speeding, restraint, and one alcohol module were capable of improving behavior. Other modules demonstrated an ability to improve knowledge and attitudes but failed to induce behavioral change. Printed materials developed within this project are presented in the second volume of this report. 19 references.

057

Supplemental Driver Safety Program Development Final Report: Volume II: Pilot and Field Test Module Materials.

McPherson, K. and Weidman, J. R.

Alexandria, VA, National Public Services Research Institute, (DOT HS 806 472), [271] p., February 1983.

Available from: NTIS; Order No. PB84-13649 8.

The National Highway Traffic Safety Administration sponsored research to develop materials for use among drivers 16 to 18 years old by high schools or other service providers in a position to provide educational experiences to teenagers. Four subjects critical to the intended audience were addressed: speed management, alcohol, restraint usage, and hazard perception. These materials were intended to supplement existing driver education programming offered by high schools. Section I included instructor's guides, visuals and student manuals for three drinking-driving programs. Section II contained instructor's guides and student manuals for five safety restraint modules. Section III provided an instructor's guide and a student manual on speed management. Section IV offered an instructor's guide to a module on pedestrian-cyclist hazard perception. Descriptions of the development and evaluation of the materials contained in this volume are in Volume I of this report.

058

Parental Views on Issues Related to Traffic Safety Education and the Licensing of Teenage Drivers. Results of a Statewide Survey of Washington Parents. Traffic Safety Education Executive Summary 1983.

Plato, K. C. and Rasp, A., Jr.

Olympia, WA, Washington Office of the State Superintendent of Public Instruction, 13 p., February 1983.

Available from: ERIC; Order No. ED-241 847.

Solicited in a statewide survey as part of a larger study focusing on public opinions of traffic safety education were parental views on (1) safety education effectiveness, (2) the licensing of teenage drivers, and (3) parental involvement in driver education in the State of Washington. Parents of recently licensed teenage drivers

(553 mothers, 255 fathers, and 24 guardians), who had an average of 25 years of driving experience, completed a 22 question one-page survey. An analysis of the results showed that parents supported the requirement of a traffic safety education course prior to licensing but they did not feel an advanced course was needed. Parents also believed that traffic safety education helped teens to learn highway regulations and to operate a motor vehicle in a safe manner. They also supported probationary licensing for 16 and 17 year olds, the license that could be taken away for poor driving performance. Parents did not support, however, a restrictive license that would prohibit 16 and 17 year olds from driving between midnight and 6 a.m. Parents believed teens should not have to wait until they were 16 to enroll in traffic safety education courses. The majority of parents reported helping their teenager learn to drive, spending an average of 58 hours in the effort. Parents reported they were willing to pay part of the course fee, and they felt a fee in the $31 to $45 range was appropriate.

059

Field Test of a Motorcycle Safety Education Course for Novice Riders (Final Report).

Thackray, R. M., Jr.; Prescott, J. C.; and Dueker, R. L.
Glen Burnie, MD, Applied Science Associates Inc. (DOT HS-806-451), [200] p., July 1983.
Available from: NTIS; Order No. PB84-127836.

This large scale field test evaluated the effectiveness, user acceptance, and administrative feasibility of the Motor Safety Foundation's (MSF's) Motorcycle Rider Course (MRC), a safety education curriculum for novice riders. Pretests and posttests measured knowledge and skills acquired in either a 12-hour or a 20-hour course, while performance tests evaluated the on-street training portion of the program. The target audience consisted of high school students, with a total of 109 completing all course requirements. Results were generally positive and indicated that the MRC was effective in developing basic skills and knowledge needed, while providing students with an enjoyable experience for which they were willing to pay. Instructors, administrators, and parents approved of the course because it was administratively feasible. The curriculum should be revised to increase safety, and additional research should be undertaken to develop and test improved training exercises. Also, the curriculum should be updated periodically to reflect important motorcycle safety research and development efforts as they are completed. 13 references.

060

Teenaged Drivers and Fatal Crash Responsibility.

Williams, A. F. and Karpf, R. S.
Washington, DC, Insurance Institute for Highway Safety, 25 p., August 1982.
Available from: ERIC; Order No. ED 221 685.

According to data obtained for the year 1978 from the Fatal Accident Reporting System (FARS) and from State governments under contract to the National Highway Traffic Safety Administration, teenaged drivers (especially males) have much higher rates of fatal crash involvement than older drivers. In addition, teenaged drivers are more likely than their older counterparts to be responsible for the crash. Also noteworthy is the fact that the deaths for which teenagers are responsible occur disproportionately to people other than themselves. Past policies aimed at producing drivers who are less likely to crash have included use of education, restrictive licensing practices, enforcement of laws pertaining to vehicle operation, and suspension or rehabilitation of drivers with crashes or violations. Since these have had only limited success, it is evident that more effective policies are needed. Deaths resulting from teenagers' driving might be more effectively reduced by adopting policies that restrict their driving and by ensuring that long-proven automatic injury reduction technologies become standard in all motor vehicles. 14 references.

• GENERAL TRAFFIC SAFETY

061

Scandinavian and Dutch Lessons in Childhood Road Traffic Accident Prevention.

Avery, J. G. and Avery, P. J.
British Medical Journal (Clinical Research Ed.) (London) 285(6342):621-626, August 28, 1982.

A study tour was conducted of Sweden, Norway, Denmark, and Holland to observe the efforts taken by these countries in the area of childhood accident prevention in order to derive knowledge that might be applied in Great Britain. The greatest accident risk the children in Europe experience is that of a serious or fatal road traffic accident. In Holland and Sweden, the town center and housing estate environments have been completely redesigned by making use of the "living street" or "woonerf" concept. In Sweden certain "high-rise" bicycle designs have been banned as being too difficult for children to control. All these countries have made environmental modifications to accommodate cyclists safely. Safety legislation for children as car occupants varies from country to country but considerable publicity has been given to the subject. Each of the visited countries has pioneered efforts in road safety training. While quantitative measurement of the success of these countries is difficult to assess, there has been a steady decline in the death rate due to accidents in children. This is a positive sign and should encourage Great Britain to use the lessons that the Nordic countries and Holland have provided. 20 references.

062

Physician Knowledge and Clinical Behavior Regarding Automobile Safety for Children.

Faber, M. M.; Hoppe, S. K.; and Diehl, A. K.
Pediatrics 75(2):248-253, February 1985.

The University of Texas Health Science Center at San Antonio conducted a mail survey in May 1983 to (1) assess the knowledge of pediatricians and family and general practitioners about automobile safety and child restraints and (2) determine the extent to which these physicians counsel their patients. A questionnaire consisting of true-false and multiple choice questions was sent to physicians in San Antonio, Texas. Results of the study indicate that, in general, the higher the physician's level of knowledge, the greater the likelihood the physician engaged in or promoted safety to patients. A majority of physicians never educate patients about child auto safety and few knew the details of usage of child restraints. Those with young children were better informed than others. The main source of safety information was in medical journals. More research must be done to determine sources of information on child auto safety and ways to motivate physicians to educate their patients. As authority figures, physicians can take advantage of the many opportunities for intervention and influence patients to take preventive actions to increase the use of child safety restraints. 17 references.

063

Guidelines for a K-12 Traffic Safety Education Curriculum. Volume I: Procedures and Findings, (Final Report).

Lockett, D. W. and Wyron, R. C.

Washington, DC, Creative Associates, Inc. (DOT HS-806-448), 256 p., June 1983.

Available from: NTIS; Order No. PB84-127307.

This project, sponsored by the National Highway Traffic Safety Administration, recommends content and instructional approach guidelines for a K-12 traffic safety education curriculum. Volume I (of two volumes) outlines the purpose, procedures, and findings of work completed in this project. The specific project requirements are to identify (1) content requirements for a curriculum, (2) developmental capabilities of school age children, (3) the most suitable approach for teaching safety to specific age groups, and (4) issues affecting implementation, evaluation, and research of K-12 traffic safety education programs. At the beginning of the project literature on the following topics was reviewed: (1) traffic accidents and developmental capabilities of school age children; (2) primary prevention programs in alcohol abuse; and (3) the perceptual, motor, cognitive, and social capabilities of school age children. Three documents in this volume present the results of the literature reviews of these topics. They demonstrate the most effective ways to teach these different age groups and show that more research is needed on the developmental aspects. An advisory panel of experts in related fields has reviewed this project's content and instructional approach recommendations. Volume II contains the content and instruction approach recommended for the K-12 traffic safety curriculum. 245 references.

064

Guidelines for a K-12 Traffic Safety Education Curriculum. Volume II: Curriculum Content and Instructional Approach (Final Report).

Lockett, D. W. and Wyron, R. C.

Washington, DC, Creative Associates, Inc. (DOT 45-806-449), 92 p., June 1983.

Available from: NTIS; Order No. PB84-127315.

Volume II (of two volumes) contains the recommended content and instructional approach guidelines for a K-12 traffic safety education curriculum developed under the sponsorship of the National Highway Traffic Safety Administration. Four content areas: occupant, alcohol, pedestrian, and bicycle safety are taught in this curriculum. This volume includes (1) an overview of instruction; (2) a discussion of estimated teaching time projected for one academic year, (3) the critical information students in grades K through 12 should be taught about traffic safety, and (4) the most suitable approach for teaching traffic safety according to the developmental capabilities of students. Volume I describes the procedures utilized in completing the work requirements and the findings. 16 references.

065

School Bus Rider Safety Education Modules for Use with Drills on School Buses.

New York State Education Dept., Albany. Div. of Physical Education, Fitness, Health, Nutrition and Safety Services.

Albany, NY, the Div., 80 p., 1981.

Available from: ERIC; ED 235 392.

The New York State Education Department has developed 10 lesson outlines for classroom instruction on school bus safety. The target audience includes teachers and members of the pupil transportation staff who conduct school bus drills. Lessons can be adapted to fit the grade level, intelligence, and special needs of students. Topics covered are (1) preparing to ride the bus, (2) boarding and proceeding to seat, (3) riding the school bus, (4) leaving the bus and proceeding to destination, (5) importance of safe and desirable behavior, (6) hazardous weather and road conditions, (7) school bus collisions, (8) emergency evacuation procedures, (9) special situation school bus riders, and (10) handicapped students as bus riders. Each module contains objectives, an introduction, content outline, and a conclusion. Additional resources and visual masters for transparencies, posters, games, or handouts are included.

066

Arkansas "Safety Village" Curriculum for Teaching Safety in a Traffic Environment.

Post, G. E.; Kramer, E.; Holobaugh, D.; and Malone, C.

Little Rock, AR., Arkansas Highway Safety Program, 61 p., November 1. 1980.

Safety Village is an educational program for students in grades K-1 to help develop fundamental concepts and practices of street safety through the use of a mock traffic environment. This program was developed by the Arkansas Highway Safety Program, the Arkansas Department of Education, and the City Safety Commission of Little Rock to reduce fatalities and injuries to school children. The pilot program was conducted at Cloverdale Elementary School for the 1979-80 school year. A mock town was created and erected on a paved section of the playground. Thirty 30-minute lessons covered the following topics: street safety, traffic signs, emergency vehicles, friends to help (firemen, police, telephone operator, bus drivers), strangers and strange animals, pedestrian safety, hazardous situations, bicycle safety, passenger safety, and school bus safety. A learn by doing approach is essential for this age group of children because they benefit most through participative learning.

067
Motor Vehicles.
Robertson, L. S.
Pediatric Clinics of North America 32(1):87-94, February 1985.

For children after the first few months of life, trauma while riding in motor vehicles is the leading cause of death. Mechanical energy exchange beyond the tolerance of the organism is the primary mechanism of motor vehicle injury. The poor design of vehicles contributes to the number and severity of injuries. In spite of the fact that restraint use can reduce the incidence and severity of human impact in a crash, seatbelts and child restraints are used by a minority. Studies have found that restrained children are less disruptive during trips. Enactment of restraint use legislation is no guarantee of compliance. Research is needed to determine how educators can alter risk to children by explaining the relative risk of various vehicles and alternate modes of transportation. Advocacy is needed to make changes at the community and societal levels. Developing safer vehicles, modifying dangerous roadways, and questioning the effects of unevaluated programs are tasks for the advocate. Prevention of trauma should be a high priority of pediatricians, health experts, and society.

068
A Curriculum for Road Safety Education in Schools.
Royal Society for the Prevention of Accidents, Birmingham (England).
Birmingham, UK, the Society, 13 p., October 1983.
Available from: Royal Society for the Prevention of Accidents, Cannon House, The Priory Queensway, Birmingham, England B4 6BS.

The Royal Society for the Prevention of Accidents (RoSPA) prepared a curriculum guide for road safety education teachers and parents to provide a framework for teaching children and young people the knowledge, skills, and attitudes necessary to promote safety on the roads. Three sections of the guide focused on the particular developmental needs of various age groups. The guide provided the rationale, goals, and content of training that is appropriate at each age level. RoSPA's Safety Education Department is active in promoting safety education to children and students of all ages throughout the United Kingdom.

069
Traffic Education Using the Tufty Club.
Mann, K.
Royal Society for the Prevention of Accidents, Cannon House, The Priory Queensway, Birmingham, B4 6BS, England
1961 - Continuing.

The Royal Society for the Prevention of Accidents (England) started the Traffic Education Using the Tufty Club Program in 1961. Parents and children ages 3-7 years are targeted for education in accident prevention on the road, in the home, and on and near water. The goal is to engender a positive attitude toward road safety, and to form a basis for further training that reduces the number of casualties involving children on the road. Tufty, a bushy tailed squirrel, is the central figure in stories and educational material that demonstrate simple road safety lessons. Individuals or groups of children can become members of the club free of charge. Instructional methods include an extensive range of Tufty teaching books, games, audiovisual aids, a newsletter, a song book, stories, puzzles, and posters. The popularity of the program is reflected in the current figure of 25,000 affiliated Tufty clubs throughout Great Britain.

• PEDESTRIAN SAFETY

070
Experimental Field Test of Proposed Anti-Dart-Out Training Programs. Volume 1. Conduct and Results (Final Report).
Dueker, R. L.
Valencia, PA, Applied Science Associates, Inc., (DOT HS-806-195), 1 v. (various pagings), December 1981.
Available from: NTIS; Order No. PB83-112656.

Applied Science Associates tested the effectiveness of two experimental training programs in reducing dart-out type pedestrian accidents occurring to children in the 5-9 year old age group. Detailed descriptions provided information on the two training alternatives. Of the two, a film program and a film simulator program, the film program was found to be more effective in reducing the accidents among children exposed to the program. This conclusion was based on statistical and intuitive evidence. Before- and after-accident and street crossing behavior data were collected in one city for each program. Accident data were collected in three comparison cities. Data on student and teacher reactions and deviations in the conduct of the program were also collected. The film program was recommended for further testing and eventual promotion as a child pedestrian accident countermeasure.

TRANSPORTATION INJURIES

071

Experimental Field Test of Proposed Anti-Dart-Out Training Programs. Volume 3. Program Staff Training Materials and Videotape-Film (Final Report).

Dueker, R. L. and Berger, S. S.

Valencia, PA, Applied Science Associates, Inc., (DOT HS-806-197), 1 v. (various pagings), December 1981.

Available from: NTIS; Order No. PB83-158419.

This volume (Volume 3 of three volumes) provides detailed descriptions of supplemental program materials suggested for use with the recommended version of The Safe Street Crossing Training Program (SSCTP). SSCTP is a pedestrian safety program designed to prevent dart-out type accidents among children ages 5-9 years old in grades K-3. Among these materials are short courses for training coordinators and instructors, lesson plans, reproducible copies of overhead slides, a script for a recommended videotape, and self-test quizzes. This program, sponsored by the National Highway Traffic Safety Administration, teaches children to cross the street safely under all conditions through practice of the correct street crossing procedures.

072

Experimental Field Test of Proposed Anti-Dart-Out Training Programs. Volume 2. Implementation Guidelines and Program Materials (Final Report).

Dueker, R. L. and Berger, S. S.Valencia, PA, Applied Science Associates, Inc., (DOT HS-806-196), 1 v. (various pagings), December 1981.

Available from: NTIS; Order No. PB83-112664.

This volume (Volume 2 of three volumes) presents detailed descriptions of all training materials used in The Safe Street Crossing Training Program, which is a child pedestrian safety program designed to prevent dart-out type accidents among children ages 5-9 years old in grades K-3. Rather than telling children what not to do, the program teaches children how to cross the street safely under all conditions through practice of the correct street crossing procedures during play activities. The program is sponsored by the National Highway Traffic Safety Administration. This volume includes the full text of the program guides for coordinators, principals, and instructors and supplemental materials. Play activities consist of practicing street crossing, games, push-around cars, and films. All elementary schools in a school system should conduct this training. Schools in low-income areas have a special need for this type of training because they are usually in areas of heavy traffic density and high pedestrian traffic rates. Since over one-half of all child pedestrian accidents are attributed to dart-out accidents, it is important to teach children a simple procedure that will prevent them from running out into the street.

073

Problem Identification, Implementation and Evaluation of a Pedestrian Safety Program.

Fortenberry, J. C. and Brown, D. B.

Accident Analysis and Prevention (Oxford) 14(4):315-322, 1982.

The Alabama Office of Highway and Traffic Safety, in conjunction with the State education department, initiated pedestrian safety programs in Birmingham, Montgomery, Mobile, and Huntsville targeted to children 6 and 7 years old. This group was identified for training because they were over-represented in pedestrian accidents in Alabama. The programs were strictly educational in nature and used learning activities to teach specific objectives and safe behaviors. These activities included practicing appropriate behaviors, discussing safety facts and situations, displaying traffic signs and signals, and discussing and demonstrating the meaning of right-of-way. Following program initiation, there was a reduction in both the absolute number and relative ratios of pedestrian accidents in the four training cities. It was estimated that approximately 40 pedestrian accidents were prevented during the 2-year follow-up period. 9 references.

074

Pedestrian Injuries to Children and Youth.

Guyer, B.; Talbot, A. M.; and Pless, I. B.

Pediatric Clinics of North America 32(1):163-174, February 1985.

A review of the literature on the epidemiology of pedestrian injuries introduces clinicians to the literature on pedestrian traffic safety and child behavior. Strategies to target prevention efforts at agent, host, or environment are applied to (1) teaching young children to be safer pedestrians; (2) modifying behavior; and (3) engineering and changing the architecture of roads, vehicles, and traffic. Pediatricians must clarify their role in injury prevention efforts and act as children's advocates. Teachers, police, safety officers, and civil and traffic engineers can use their professional skills to help foster a multidisciplinary approach to injury prevention. Comparative international statistics indicate that some countries have lower injury rates. These rates can serve as goals for pedestrian injury prevention activities in North America. 22 references.

075

A Roadside Simulation of Road Crossing for Children.

Lee, D. N.; Young, D. S.; and McLaughlin, C. M.

Ergonomics (London) 27(12):1271-1281, 1984.

Since the casualty rate for child pedestrians in Britain is over four times that of adults, the Department of Psychology at the University of Edinburgh, Scotland, designed a simulation that gives children practical experience similar to crossing the road. A single lane pretend road was laid out on the pavement alongside a real road. The child stood curbside and judged whether it was safe to cross the road when vehicles passed. Ninety-four children between the ages of 5-10 years old were recruited from three

Edinburgh primary schools. A group of adults were tested similarly for comparison purposes. Results of the test indicate that the pretend task simulated the real one. Children were less consistent than adults in their crossing times, but nearly 50 percent of the 5-year-olds performed in the adult range. Children were more cautious than adults but they could benefit from practice in judging the size of gaps in traffic. Practical training should be initiated as early as possible to ensure that skills keep ahead of exposure. 21 references.

076

A Parent Training Program for the Road. Safety Education of Preschool Children.

Limbourg, M. and Gerber, D.

Accident Analysis and Prevention (Oxford) 13(3):255-267, 1981.

The West German Ministry of Transportation provided funding for a research project on road safety training for preschool children 3 to 6 years old. Behavioral training methods were used to modify the behavior of the children in traffic. Chaining of behavior, stimulus control, modeling procedures, and positive reinforcement were used in the training. Four pilot studies were conducted to test the program's effectiveness. Training stages were divided in four developmental groups based on age, with each group having specific behavioral goals to attain. Parents worked with their children to teach and demonstrate proper traffic safety techniques. Results of the behavioral training program depended upon the age of the children, the training quality, and the training frequency. Follow-up showed that safety scores dropped in all groups but were still higher in the two experimental groups than in the control groups. 48 references.

077

Traffic Education for Young Pedestrians: An Introduction.

Michon. J. A.

Accident Analysis and Prevention (Oxford) 13(3):163-167, 1981.

This paper on traffic education for young children is presented in two sections. Section 1 introduces six papers presented at a workshop entitled Training Objectives for Child Pedestrians, sponsored by the Organization for Economic Cooperation and Development (OECD). The six papers describe (1) safe task performance, (2) the tasks of child pedestrians, (3) the main determinants of unsafe behavior and accidents, (4) education methods based on the age of the child, (5) achievement of the objectives of traffic education, and (6) parent training programs. In Section 2, the author discusses some general considerations that seem to underlie most of the recent efforts in traffic education: (1) children can be taught to recognize basic situations and obtain a realistic insight of what their options are in such situations, (2) skills rather than knowledge should be taught in a realistic environment, (3) children can be taught how to behave safely in traffic by using a combination of methods and media, (4) positive reinforcement and parent participation are necessary for a successful program, (5) effective programs usually restrict themselves to traffic tasks that are performed repeatedly and are relatively the most dangerous, and (6) segregation children from traffic should only be used if all other teaching techniques fail. 6 references.

078

A Behavioural Approach to Improving Traffic Behaviour of Young Children.

Rothengatter, T.

Ergonomics (London) 27(2):147-160, February 1984.

The Traffic Research Centre at the University of Groningen in The Netherlands conducted a traffic education program to determine the effectiveness of different groups in teaching road-crossing behavior to young children ages 4-6 years old. Parents and experienced assistants taught two different groups and a third group acted as a control. The developed method of training consisted of phases of modeling, guidance and prompting, chaining, and feedback. In the modeling phase, the required crossing behavior was demonstrated and verbalized. The guidance and prompting phase involved verbally encouraging the child to perform the necessary elements of the road-crossing procedure. In the chaining phase, the elements of the crossing procedure were practiced until they became one behavior. The feedback phase involved rehearsal of the elements that were omitted during the crossing. In addition, reinforcement was used after the training was successfully completed. The program lasted 3 weeks with a minimum of four training sessions for each type of street crossing behavior. All groups, including the control group improved their traffic knowledge after the program. Follow-up after 3 months indicated crossing behavior was still at a higher level than before the program. The results demonstrate that young children require explicit training of every aspect of traffic behavior that is relevant to their age and parents can be capable teachers when they are presented with suitable training; however, children will still be vulnerable in traffic. 36 references.

079

Teaching Pedestrian Safety Skills to Young Children: An Analysis and One-Year Follow-Up.

Yeaton, W. H. and Bailey, J. S.

Journal of Applied Behavior Analysis 11(3):315-329, Fall 1978.

A multifaceted training approach to teach street-crossing skills to children was tested at two schools in Tallahassee, Florida. Twenty-four elementary school children in grades K-3 were taught six street-crossing skills. The training approach of "tell them," "show them," "ask them," and "let them" was implemented at the street corner. Children at each school rapidly improved their street-crossing skill levels. During a 1-year followup the children showed that they either maintained their skill levels or recovered them quickly with remedial training. This approach has several advantages over the traditional classroom program, including reduced teacher time, frequent and immediate feedback in the setting where the behavior is performed, and presence of a trained adult to offer protection in an emergency. Future research should address the problem of testing procedures designed to maximize pedestrian safety skills. 21 references.

080

Preschool Children in Traffic.

Weiss, R. S.

American Automobile Association, Traffic Safety Department, 8111 Gatehouse Road, Falls Church, VA 22047

1976 - Continuing.

The Preschool Children's Traffic Program of the American Automobile Association (AAA) is designed to meet the problem of pedestrian accidents involving children under 6 years of age. The program seeks to teach children specifically not to run into the street from between parked cars, and not to play in the streets, as well as to help them develop all the good habits necessary for safe performance in the traffic environment. Materials are designed to help parents teach preschoolers about traffic situations and dangers. Booklets present simple pictures in story format to emphasize learning by doing and the repetition of adult directed experiences. In addition, AAA has developed many multidisciplinary, activity centered instructional materials for other age groups. Individuals interested in more information should contact their local AAA safety or public relations department.

081

Preschool Pedestrian Safety Program.

Sutkus, J.

National Safety Council, 444 N. Michigan Avenue, Chicago, IL 60611

1983 - Continuing.

The National Safety Council developed the Preschool Pedestrian Safety Program to teach preschoolers techniques that help to reduce their involvement in traffic accidents. This program is based on the successful project implemented by the Milwaukee Safety Commission (Wisconsin), which resulted in a 33 percent reduction in accidents for 0-4 year olds, and 5 years later in a 17 percent decrease for 5-9 year olds. The Safety Council project attempts to keep preschoolers out of the street unless accompanied by an adult. It also devotes special attention to preventing dart-out accidents, which are so common among this age group. Program equipment includes a cardboard car, a puppy puppet to involve children in instructive dialogues, a poster, a teacher's guide with five lessons, and take home coloring sheets for each child to show to parents. The target audience consists of nursery schools, daycare and homecare centers, Head Start programs, and parents. This program can help adults creatively and dynamically meet their responsibility for preschooler pedestrian safety.

• SEATBELTS AND INFANT RESTRAINTS

082

Child Safety Seats Reduce Motor Vehicle Injury and Death: A Health Educator's Guide to Child Restraint.

Health Education (Ottawa) 21(2):2-7, Fall, 1982.

Child safety seats reduce motor vehicle injury and death, but not all child safety seats are equally safe. To help health professionals carry out public education programs, the Ontario government has published a child restraint manual. Starting at conception and continuing through the early years, a child's unique physical structure requires special protection in a vehicle. From conception to birth, the child's main protection in the car comes from a restrained mother whose bones, fluid, and muscle create a natural protection for the unborn child. There are four types of safety seats for children: (1) rear-facing infant carriers, from birth to 9 kg (20 lbs); (2) convertible seats, from birth to approximately 18 kg (lbs); (3) forward-facing child safety seats, from 9 kg to approximately 18 kg; and (4) booster cushions and lap belts, more than 18 kg. Proper use of child restraining devices is essential, since improper use of restraining devices can render them useless. A resource guide is appended.

083

Motor Vehicle Childhood Injuries Caused by Noncrash Falls and Ejections.

Agran, P. F.; Dunkle, D. E.; and Winn, D. G.

The Journal of the American Medical Association 253(17):2530-2533, May 3, 1985.

The University of California, with funding through a grant from the U.S. Department of Transportation, conducted a study to describe the circumstances surrounding noncrash falls and ejections of children from moving vehicles, in order to isolate those conditions susceptible to intervention. Sudden stops, accelerations, turns and swerves may cause these noncrash accidents, as well as passenger behaviors such as opening a door or changing seats in a moving vehicle. A standardized questionnaire was completed on all children up to age 15 years who were treated at selected hospitals as a result of a motor vehicle accident. Results indicated that the most serious noncrash accidents involved falls or ejections. The most common injuries were contusions, abrasions, or lacerations. Severity of the injury was greater for those injured outside of the vehicle. Other factors affecting injuries were the types of noncrash events, age of the child, and location of the child in the vehicle. Parents and guardians must take responsibility for properly restraining children in vehicles and securing all potential exits. Adolescents must be prohibited from riding on the exterior or unenclosed portions of vehicles. The authors suggest that legislation for mandatory passenger restraint use would be a major factor in eliminating this type of injury. 8 references.

084
Providence Memorial's TOTS Project.
Barr, J.
Texas Hospitals 37(5):24, October 1981.

The TOTS pilot project, designed to increase the number of El Paso, Texas, children using child restraint devices while riding in motor vehicles, has resulted in an educational program for mothers of newborns at Providence Memorial Hospital in El Paso. New mothers are shown the film The Perfect Gift and then are taught how to use the General Motors LUV safety seat by a maternal and child health educator. Parents receive brochures emphasizing the importance of restraints and suggested places of purchase. Limited numbers of LUV seats can be rented from the hospital. Conversations with new mothers as well as with mothers who gave birth before the program started indicate that parents seem gratified to know that the hospital cares for the well-being of their babies even after they go home. The program has been a success and has received support from the El Paso news media.

085
Promoting the Use of Car Safety Devices for Infants: An Intensive Health Education Approach.
Berger, L. R.; Saunders, S.; Armitage, K.; and Schauer, L.
Pediatrics 74(1):16-19, July 1984.

Researchers at the Department of Pediatrics at the University of New Mexico School of Medicine developed an approach to promote the use of infant restraints. The target audience consisted of a low-income, biracial population. Prenatal education included use of group teaching, films, infant restraint use demonstrations, and a question and answer period. After delivery, mothers received a car seat and instruction on its use. At a 2-month postpartum visit, a group discussion session was used to reinforce the importance of proper infant restraint. Results of the study indicated that the proportion of infants correctly restrained increased fourfold. The proportion of infants transported on parents laps decreased from 48 to 18 percent. There was an increase in the number of infants incorrectly restrained. This result may indicate a lack of motivation among these parents or a deficiency in the education component of the program. The researchers recommend that other groups consider this comprehensive approach to promoting the use of infant safety restraints. The results led to the conclusion that any efforts to increase the correct usage of these restraints must be accompanied by improvements in their design. 7 references.

086
The Use of Economic Incentives and Education to Modify Safety Belt Use Behavior of High School Students.
Campbell, B. J.; Hunter, W. W.; and Stutts, J. C.
Health Education 15(5):30-33, August-September 1984

The National Highway Transportation Safety Administration funded a project to demonstrate the impact of education and economic incentives on seatbelt use behavior of high school students. Thirteen hundred students at Chapel Hill High School, North Carolina, were subjects in this study using monetary rewards and an educational campaign on the lifetime risk of accident involvement. Observations at various sites on campus and in the city were made on seatbelt usage of both students and community members. Five dollar awards were made every few days to those observed wearing seatbelts. A lottery was also held to award cash prizes to those who were observed wearing seatbelts. Approximately two-thirds of the drivers observed were using seat restraints during the incentive period. This was nearly a three-fold increase over the baseline period. These results indicate a positive effect of education and monetary incentives on high school students' behavior. Schools and communities could profit from combining both education and incentive prompts in efforts to change seatbelt usage behavior. 18 references.

087
Infant Passenger Safety Education in Perinatal Services in California.
Chang, A. and Levy, E.
Western Journal of Medicine 137(2):162-165, August 1982.

The availability and practice of infant passenger safety education in California hospitals with perinatal services was investigated via questionnaires sent to 205 hospitals. Of the 166 hospitals that responded, 53 (31.9 percent) routinely provided some information on infant car safety to parents of newborns, and 115 (69.2 percent) were interested in developing a more comprehensive program of infant passenger safety. Some 80 percent of the hospitals estimated that less than a fourth of the infants were safely restrained on leaving the hospital. Larger hospitals provided more car safety education and expressed greater interest in developing comprehensive programs in the future. Although present services are limited, there is interest in expanding infant passenger safety education both in perinatal services and childbirth education classes. An organized, multidisciplinary plan to assist hospital staff to develop infant car safety education services is needed. 11 references.

088
The Safety of Children in Cars.
Child Accident Prevention Trust, London (England).
London, the Trust, (Occasional Paper No. 2), 19 p., July 1980.

The Child Accident Prevention Committee of the Child Accident Prevention Trust presented facts on deaths and injuries to children as passengers in cars in the United Kingdom. The group analyzed statistical background and research evidence available to date. There were approximately 10,000 road casualties among children as passengers in cars and taxis. This means approximately 1 child in 100 would have been injured in this way by the age of 15. Based on the research, the following conclusions were made: (1) the safest way to transport a child in a car is to use an appropriate restraint system, (2) a series of child restraint systems should be used as the child develops, (3) when the ideal restraint system is not available, any approved form of restraint is better than none, (4) a child held by an adult is particularly at risk, (5) ejection from the car is an important cause of fatal injuries and can be prevented by using restraint systems, and (6) legislation is likely to be the most effective way to increase use of safety restraint systems. Legislation should be introduced requiring use of restraint systems and multimedia publicity and educational campaigns should be launched to heighten public awareness of the problem. All restraint devices should be British Standards Institution approved and the highway code needs to expand the section on the responsibility of drivers for their child passengers. In addition, evaluation programs should be instituted to monitor the effectiveness of these recommendations. 29 references.

089

Behavioral Approaches to Auto Safety Education.

Christophersen, E. R.

In: Preventing Childhood Injuries: Report of the Twelfth Ross Roundtable on Critical Approaches to Common Pediatric Problems in Collaboration with the Ambulatory Pediatric Association. Bergman, A. B., ed. Columbus, OH, Ross Laboratories, p. 33-39, 1982.

Studies are reviewed demonstrating the behavioral approaches to auto safety education. The literature review includes statistical findings and indicates that when well established behavioral principles are used in conjunction with other educational efforts, parents can be encouraged to use child safety seats correctly. The behavioral principles relevant in these studies are: (1) a positive approach is as effective as using scare tactics, (2) modeling may have a negative effect if hospital staff members are modeling bad practices while passing out literature on good practices, (3) parents respond better if they can practice using the seat rather than receiving only passive education, and (4) the ease of child restraint seat use will affect parent usage. Restraint seats are the only viable option for parents to use to protect their child in a motor vehicle. The literature reveals that the ideal child passenger safety program would include State legislation, a physician discharge order, a hospital loaner program, nurse modeling, parent practice, physician follow-up, and community support. 9 references.

090

Parental Compliance with Car Seat Usage: A Positive Approach with Long-Term Follow-Up.

Christophersen, E. R. and Gyulay, J. E.

Journal of Pediatric Psychology 6(3):301-312, September 1981.

A study was designed to assess the effectiveness of a single clinic visit and written protocol in increasing mothers' compliance with the recommendation to use child safety restraints in automobiles. The use of child restraint devices was observed in eight mothers of children 2-4 years of age before and after a written protocol was presented. Safety was never mentioned in any visit. Emphasis was placed on the fact that a child's behavior in a car would improve if the child was placed in a restraint device. Results showed that immediately following the clinic visit five mothers began using the car seats. At 3 month follow-up six mothers were using the seats, while at 6 months five were using the seats. At the 1-year follow-up only three were using the restraints. This approach encompasses the educational modalities of verbal and written instruction, modeling and behavioral rehearsal. The health care provider consistently reinforces the parent when the expectation planted is realized on most, if not all, subsequent rides. The reward for the parents' altered behavior is superior to using threats about the negative consequences of not using car seats. 10 references.

091

A Statewide Hospital-Based Program to Improve Child Passenger Safety.

Colletti, R. B.

Health Education Quarterly 11(2):207-213, Summer 1984.

This program, begun in Vermont in 1979 and operated by volunteers, is a statewide network of hospital-based low-cost car seat rental and educational programs. Early Rider, an instructional manual printed and provided free by the National Highway Traffic Safety Administration, serves as a curriculum outline for the hospitals. Each hospital independently organizes its program to meet the needs and resources of the community. Activities include prenatal classes, films, discussions on child passenger safety, pamphlets, demonstrations of car seat use, and visits to new mothers in the maternity ward. In addition, the program is publicized in the local paper and on the radio. In 4 years the rate of correct car seat usage by newborns at hospital discharge increased from less than 16 percent to 71 percent. High-usage rates appear to continue in the first 2 years of life. It is hypothesized that availability of car seats, direct educational intervention in the hospitals, high visibility, and indirect educational processes in the community contributed to these changes. It is concluded that hospital-based programs should be included in comprehensive strategies to improve child passenger safety. 15 references.

092

The Application of Health Education Principles to Automobile Child Restraint Programs.

Eriksen, M. P. and Gielen, A. C.

Health Education Quarterly 10(1):30-55, Spring 1983.

Project KISS (Kids in Safety Seats) is a comprehensive health education program designed to increase the proper and consistent use of car safety seats among Maryland parents. The State of Maryland used the PRECEDE model for planning, implementing, and evaluating the program. An educational diagnosis was performed based on a review of the literature on child restraints and an analysis of Maryland accident and safety data. The review indicated that no single approach is effective in achieving the objective of proper and consistent car seat use among a majority of parents. It found that effectiveness of an intervention depended upon the degree to which it emphasized child restraint use. Because of this study, specific educational activities and materials were developed to address the predisposing, enabling, and reinforcing factors associated with the proper use of car safety seats.

See also abstract nos. 093, 129.

093

Project KISS (Kids in Safety Seats): Educational Approaches and Evaluation Measures.

Gielen, A. C. and Radius, S.

Health Education 15(5):43-47, August-September 1984.

The educational approaches and evaluation measures used on Project KISS (Kids in Safety Seats) are described. Project KISS, a demonstration program of the Health Education Center, Maryland Department of Health and Mental Hygiene, is being conducted to address the problem of childhood morbidity and mortality from motor vehicle accidents. The PRECEDE Model was chosen to specify behaviors linked to motor vehicle accident injury and death. Factors that were barriers to encouraging seat restraint usage were identified and specific activities directed toward each of these were implemented. Multiple educational methods were used to change attitudes and behaviors of parents, health care personnel, legislators, and community groups. Project evaluation measures, which began in 1980, included (1) documenting the number of programs operating, materials distributed, and training sessions conducted; (2) examining the degree to which project activities influenced proper use of car safety seats; and (3) evaluating the changes in morbidity and mortality among the target population. Current research is determining the degree to which prenatal attitudes predict car seat usage postnatally. Future efforts should include evaluating health education to monitor program progress and measure outcomes. 18 references.

See also abstract nos. 092, 129.

094

Prenatal Child Safety Education.

Goodson, J. G.; Buller, C.; and Goodson, W. H., III

Obstetrics and Gynecology 65(3):312-315, March 1985.

A special curriculum was designed and incorporated into routine prenatal classes to teach child passenger safety information to expectant parents at two California hospitals. Three prenatal classes at each hospital were taught in the usual manner. Three other classes at each hospital were given a specially prepared 30-minute lecture and demonstration on child passenger safety seats. A film was shown and educational materials were distributed. Follow-up contacts 4 to 6 months later revealed that while parents from both groups stated they used car seats, the actual use and compliance with car seat recommendations was significantly higher for those who had received special intensive prenatal instruction in the use of safety seats. There were significant differences between the hospitals, which can be attributed to differences in the education, socioeconomic level, and lifestyles of the patients in the two hospitals. Based on the results, it is concluded that a prenatal child passenger safety curriculum will bring about a significant increase in safety seat use by parents. Persons who provide prenatal care should emphasize child passenger safety during routine prenatal care. 8 references.

095

A Prenatal and Postpartum Safety Education Program: Influence on Parental Use of Infant Car Restraints.

Greenberg, L. W. and Coleman, A. B.

Journal of Developmental and Behavioral Pediatrics 3(1):32-34, March 1982.

The effects of prenatal and postnatal car safety education on parental use of infant car restraints were examined. Parents participated in one of the following conditions: (1) prenatal car safety education with counseling about car safety restraints; (2) prenatal car safety education without counseling about car safety restraints; (3) postpartum, inhospital education about car safety and use of safety restraints; (4) both prenatal and postnatal education; and (5) no education about car safety or safety restraint use. Participants completed a questionnaire eliciting information about the use of infant seat restraints on the way home from the hospital. Although differences were not statistically significant, reported use of infant restraints on the trip home was highest in the prenatal plus postnatal education group. Counseling about use of car safety restraints in any period was associated with higher restraint use than no counseling. The pediatricians' role in effecting positive behavioral changes in infant car safety and other areas is discussed. 15 references.

096

Demographic Predictors of Infant Car Seat Use.

Hletko, P. J.; Hletko, J. D.; Shelness, A. M.; and Robin, S. S.

American Journal of Diseases of Children 137(11):1061-1063, November 1983.

This study was designed to identify parents most likely to respond to a postpartum education program by correctly restraining their infants in child restraint devices (CRD's). All new mothers at the Borgess Medical Center, Kalamazoo, Michigan, took part in a one-on-one instruction about the CRD's and were then offered the use of a restraint device for a nominal fee or no fee. Observation studies for correct use were performed at the pediatric clinic parking lot at the time of the 2-week preventive health care visit. Positive correlation with correct CRD use was found when (1) parents were married, (2) mother had a professional occupation, (3) both parents were at least high school graduates, (4) both parents always used their seatbelts, (5) mother claimed to know what ipecac and cardiopulmonary resuscitation were, (6) neither parent smoked, (7) family owned two or more autos, and (8) family had a dentist. This study showed that those parents who are likely to respond to postpartum CRD education programs may be identified by the demographic predictors presented in this study. 8 references.

097

Child Passenger Safety: A Pilot Test of a K-6 Curriculum.

Li, L. K.; Waller, P. F.; Stewart, J. R.; Chi, G.; Ma, J. M.; and Bodkin, D.

Chapel Hill, NC, University of North Carolina, Highway Safety Research Center, (HSRC-PR125), 219 p., December 1983.

The University of North Carolina and the North Carolina Department of Public Instruction developed this curriculum to teach children in grades K-6 about the importance of seatbelt usage. A literature review was conducted to identify films and documents, and the curriculum was devised to target three age groups, grades K-1, 2-3, and 4-6. Songs, hands-on activities, films, collages, stories, surveys, speakers, and a letter writing campaign were activities suggested in the curriculum. Pre- and postknowledge tests showed an overall improvement in the treatment group and a slight improvement from pre- to posttest in the comparison group; however, results were mixed and there was considerable variation among schools and subtopics. Use of the curriculum was associated with increases in observed seatbelt usage. It must be recognized that there are other low-cost strategies for obtaining greater seatbelt usage which may be more cost effective than educational efforts. 2 references.

098

An Annotated Guide to Safety Belt Education Resources for Secondary School Teachers.

Lovato, C.; Thompson, J. D.; and Kolbe, L. J.

Health Education 15(5):57-62, August-September 1984.

Motor vehicle accidents are the leading cause of death among adolescents. In order to combat this, the University of Texas Center for Health Promotion Research and Development, under contract to the National Highway Traffic Safety Administration, conducted a review of existing publications on the use of seatbelts among new adolescent drivers. The result is this guide to such resources. These materials can be used by teachers and students to obtain a better understanding of topics such as (1) the morbidity and mortality from vehicular crashes, (2) the dynamics of a crash, (3) the effectiveness of seatbelts, (4) myths and common excuses for not using seatbelts, and (5) the efficacy of various means designed to increase the use of seatbelts. All materials listed have annotations and ordering information. A section on selected background readings presents information on five documents for teachers and five documents for students. The audiovisual materials section describes 22 filmstrips, audiovisual packages, videotapes, public service announcements, and slide presentations. Eleven curriculum packages and four catalogues and bibliographies are presented. A final section outlines additional sources of information and materials. 4 references.

099

TLC. Tender Loving Care for Tender Living Cargo: An Innovative Approach to Child Passenger Safety in a Local Health Department.

McCooey, E. B. and Feun, L.

Health Education 15(5):48-51, August-September 1984.

The Oakland County Health Division (OCHD) in Michigan developed and implemented a unique Child Passenger Safety (CPS) Project to inform and educate the public and to promote passage of a law on child passenger safety. Through the cooperation of governmental agencies, private and voluntary sectors, and interested individuals, the OCHD can provide comprehensive services, activities, and data collection on child passenger safety. Response to the project has been positive both in the county government and in the community. A pretest-posttest design was used to evaluate the program. Results of a questionnaire distributed to county employees and the community indicated an increased awareness of the problem and the need for child passenger safety restraints. A significant increase in reported usage of restraints was also noted. Recommendations include making the program a permanent effort, continuing county government support, devising realistic goals for the future that are measurable and attainable, and developing a reporting system for statistical purposes. Oakland county plans to continue encouraging child passenger safety efforts as long as automobile accidents pose a significant threat to area children. 8 references.

100

Four Approaches to Instruction in Occupant-Restraint Use.

McKnight, A. J. and McPherson, K.

In: Transportation Research Board, Washington, DC. Automotive Technology, Information Needs of Highway Users, and Promotion of Safety Belt Usage. Washington, DC, Transportation Research Board, National Research Council, National Academy of Sciences, (Transportation Research Record 844), p. 55-57, 1982.

The National Highway Traffic Safety Administration sponsored four test programs for increasing teenage occupant restraint use in automobiles. The goal of the program was to teach teenage drivers to use seatbelts and encourage their passengers to do the same. Each of the four programs contained an information program of 3 hours of classroom instruction. In addition, three of the programs provided either a testimonial, a vehicle demonstration, or use of a device to simulate the force of a crash. One hundred high school students at four schools in St. Louis, Missouri, were administered pre- and posttests. Results indicated that all four programs were capable of having a beneficial effect. The informational, testimonial, and vehicle programs produced significant gains in knowledge about, attitudes toward, and use of restraints. The findings indicated that a school program might influence teenage drivers' use of safety restraints. Factual information about restraints and their nonuse must be communicated in classes and more research is needed to determine if any additional benefit is derived from techniques other than the informational program.

101

The Effect of Elementary Traffic Safety Programs on Out-of-School Safety Behavior.

Miller, D. A.

Charleston, SC, College of Charleston, Department of P.E. and Health, 16 p., [1982].

Available from: ERIC; Order No. ED-244-918.

The Beltman multimedia traffic safety program, which attempts to develop the habit of wearing seatbelts and exercising positive safety attitudes, was evaluated as an instructional tool in grades one through three. Three study groups consisting of 550 second grade students were divided into one control and two experimental groups. The control group teachers taught safety in the traditional way. Experimental group teachers received inservice training and followed 16 lesson plans featuring the Beltman program. At the time of the first behavioral assessment, the three groups exhibited statistically the same total on out-of-school safety behavior. On the followup assessment, the experimental group students exhibited statistically more positive out-of-school safety behavior than did the control group students. After Beltman, experimental students scored significantly higher than controls on the knowledge test. The Beltman program was more effective than a traditional safety program in instilling positive out-of-school behavior. Based on these results, elementary traffic safety programs can influence positive out-of-school safety behavior.

See also abstract nos. 102, 117.

102

An Evaluation of the Beltman Traffic Safety Program for Children.

Miller, D. A. and Davis, L. G.

Health Education 15(5):51-53, August-September 1984.

The Oregon State Traffic Safety Commission funded the Eugene (Oregon) School District 4 to field test the educational materials of the multimedia traffic safety teaching kit called Beltman. This curriculum is designed to teach pedestrian safety and increase seatbelt use among students in grades one and two. Twenty-eight teachers were divided into a control group and two experimental groups. The controls taught safety as they usually would. The first experimental group used only Beltman materials, while the second group used Beltman materials supplemented by two booster lessons. Multiple choice tests were used to measure safety knowledge. The behavioral assessment showed that experimental group students exhibited more positive out of school behavior than the control group students. Teachers' evaluations of Beltman were enthusiastic and positive. Based on this study, the following recommendations were made: (1) schools should encourage parents to reinforce positive safety behavior, since homes and schools need to combine efforts; (2) teachers should experiment with different length instruction periods; and (3) Beltman materials should be adjusted for use with children in grades K-6. 9 references.

See also abstract nos. 101, 117.

103

Children Still Aren't Being Buckled Up.

Nachem, B. and Bass, R. A.

MCN; American Journal of Maternal Child Nursing 9(5):320-323, September-October 1984.

Promoting the use of child restraint devices (CRD's) must be a top priority for all nurses involved in maternal-child health care. Studies indicate that CRD's could prevent 80 to 90 percent of fatalities and injuries. In order to teach proper use of restraint devices nurses should assess each family's beliefs about CRD's and then provide incentive for the family to use the systems. Several teaching approaches should be used, including verbal information, written materials, pictures, films, and demonstrations. Simply giving free CRD's to parents is not enough, good teaching is necessary. Parents and all people who are responsible for children must be made aware of the importance of child passenger safety. Nurses and nurse practitioners who work in all settings have unique opportunities to promote the use of CRD's and to ensure that children ride wearing seatbelts. Since education alone is not enough, nurses can also encourage States to pass laws that require children traveling in cars to be restrained. 13 references.

104

We Love You — Buckle Up.

National Highway Traffic Safety Administration, Washington, DC

Washington, DC, the Administration, 7 pieces in folder, [198-].

To help children learn about seatbelts and child safety seats, the National Highway Traffic Safety Administration developed an educational package for the use of early childhood education teachers. This was done in cooperation with the National Association for the Education of Young Children and the members of the Early Childhood Education Steering Committee of the Washington Traffic Safety Commission. The teacher's guide presents a story entitled Who Wants to be a Buckle-up Helper? a poster, a letter to parents, stickers, and a brochure that answers safety questions. Additional activity ideas are also presented to help the teacher structure a program that will meet the particular needs of each class. The curriculum is designed so teachers can incorporate the activities into their classes over a period of weeks or even months. Passenger safety ideas can be highlighted daily in art projects, on field trips, and at arrival and departure time. Because the biggest threat to the health and safety of young children is an automobile accident, it is important that both parents and children be educated about using seatbelts and child safety seats.

105
A Safer Way for Everyday.
National Highway Traffic Safety Administration, Washington, DC
Washington, DC, the Administration, 16 pieces in container, [19 —].

The purpose of this guide is to teach children in grades K-3 the importance of wearing safety belts so that they will develop habits that promote health and safety throughout their lives. The National Parent Teachers Association, The National Association of Elementary School Principals, and the National Highway Traffic Safety Administration developed this program that consists of six lessons, a teacher's guide, an occupant protection manual, a poster, and a wall chart. Lessons may be supplemented by using the Safety Belt Activity Book, which is a guide for teachers of grades K-6. This program will increase student awareness of the use of seatbelts as a regular part of health maintenance and it will encourage students to promote the regular use of safety restraints among their families and friends.

106
Protecting Our Own: Community Child Passenger Safety Programs.
National Highway Traffic Safety Administration, Washington, DC.
[Washington, DC], the Administration (DOT HS 806 706), 73 p., March 1985.

The National Highway Traffic Safety Administration designed a manual to help communities (1) understand the problem of child passenger safety, (2) identify local initiatives, (3) plan projects and carry them out, and (4) give access to adequate, accurate, and up-to-date technical information. The entire community can get involved through the efforts of a local child safety advocacy group. Law enforcement personnel, health care providers, the business community, and civic groups all have resources that can be utilized to promote child passenger safety. This manual presents guidelines to use in planning and conducting a project and also provides detailed technical information on how the restraint systems work and how they should be used. Detailed appendices provide lists of newsletters, organizations, manufacturers, government offices, and multimedia concerned with child passenger safety, as well as a glossary of technical terms. 28 references.

107
Safety Study: Child Passenger Protection Against Death, Disability, and Disfigurement in Motor Vehicle Accidents.
National Transportation Safety Board, Washington, DC. Bureau of Safety Programs.
Washington, DC. the Board (NTSB-SS-83-01). 128 p., September 7, 1983.
Available from: NTIS; Order No. PB83-917005.

The National Transportation Safety Board examined the issue of child motor vehicle passenger protection from three viewpoints: (1) through a series of 53 detailed investigations of accidents involving infants and small children, restrained and unrestrained; (2) through a series of three regional public hearings; and (3) through a review of the child passenger protection laws that had been enacted by 40 States and the District of Columbia as of mid-1983. Scenarios of accident cases highlight crash consequences to unrestrained children and the often dramatic lifesaving and injury prevention benefits of child safety seats. Misuse of child safety seats is a significant problem in accidents, and special effort is needed to combat this, as well as to implement and enforce child passenger protection laws effectively. Another major problem is that virtually none of the 41 laws were designed to foster the transition of children from safety seat use to seatbelt use. Areas for further research are identified, and suggestions are made for furthering effective child passenger protection laws.

108
Seatbelt Use Among Preadolescent Children: Implications for School Health Education.
Page, R. M.
Health Education 15(5):35-38, August-September 1984.

The factors influencing preadolescents not to wear seatbelts were examined in a study of 256 students in grades six and seven from 2 middle schools in Utah. The data collection instrument included (1) 16 single 7-point bipolar scales used to measure agreement or disagreement with statements about the reasons for not wearing seatbelts and (2) a group of fill-in-the-blank questions. Multiple regression techniques were used to determine the reasons given most often. Results of the study indicated that parents play a very important factor in determining seatbelt use. Males and females did not differ significantly on frequency of use. Peer and social factors as well as misinformation about seatbelts seem to influence seatbelt usage behavior. Health education programs can have a great influence on the use of seatbelts. The programs can correct misinformation, counter the effects of negative peer pressure, and deal with issues of comfort and convenience. 6 references.

109
These Children Didn't Have to Die.
Prazak-Rice, M.
Canadian Nurse (Montreal) 78(10):20-21, November 1982.

The simple acts of choosing and using proper automobile child restraints, car seats or seat belts, can reduce significantly the number of children (approximately 26,000) killed in auto accidents in Canada every year. Although nurses concerned with this problem can push for appropriate legislation, legislation alone is not enough. Nurses must become knowledgeable enough in this area to serve as effective educators. By failing to educate new mothers in preventive health care (the use of child safety restraints) nurses place the lives of the babies in jeopardy the moment they leave the hospital. Automobile accidents are one of the major causes of preventable deaths and injuries to children; infant restraints prevent such injuries. It is preferable to start educating the parents before a child's birth rather than ask why restraints are not used after birth. With this approach, parents will not be placed on the defensive about prebirth education. Furthermore, it is easier to establish good habits than to try to change bad ones. 12 references.

110
Child Passenger Safety. Part III.
Righi, F. C.
Florida Nurse 31(5):20-23, May 1983.

Nurses have a legitimate role in helping prevent accidental injury to children and adults in automobiles. Highway safety research clearly demonstrates that use of child safety seats and seatbelts reduce the number of deaths and injuries to persons involved in car crashes. In developing strategies to promote automobile safety, nurses should consider the following factors that inhibit or promote use of safety restraints: (1) inadequate driver education, (2) lack of information about the benefits of using seatbelts and safety seats, (3) professional influence and role models, (4) use of teachable moments, (5) parental resistance, (6) perceived financial barriers to purchasing child car seats, and (7) establishment and enforcements of laws mandating use of car safety restraints. There are three basic program types in which nurses can be involved: (1) consumer education, (2) professional education, and (3) car seat loan programs. Nurses should also act as positive role models for car safety behavior by using seatbelts themselves and insisting that their passengers also buckle up. A wide variety of resources are available to help nurses in promoting automobile safety. 4 references.

111
Preventing Death and Injury in Childhood: A Synthesis of Child Safety Seat Efforts.
Roberts, M. C. and Turner, D. S.
Health Education Quarterly 11(2):181-193, Summer 1984.

The various attempts made to motivate child safety seat usage have been documented in the literature on (1) informational and educational programs, (2) safety seat loaner programs, (3) State laws requiring seat usage, (4) behavioral improvement emphasis programs, (5) reward based programs, and (6) passive prevention approaches through airbags. An examination of these topics reveals that no one approach appears to be the solution to the complex problem of motivating the preventive behavior of acquiring and consistently using safety seats. Virtually every child is at risk because children riding in cars are at higher risk than the risk from other physical and mental health problems. Recommendations include solving the problem of availability and acquisition of appropriate seats, getting parents to use the seats properly and consistently, and encouraging comparative research to determine definitively the best motivating techniques and the settings in which the techniques are most effective. Settings for intervention should take on a developmental perspective and utilize the resource of maternity wards, pediatrician offices, and community groups. 75 references.

112
Child Auto Restraints.
Schaaf, K.
Alaska Medicine 25(3):76-78, July-September 1983.

Transporting an unrestrained child is a preventable cause of childhood death and injury, yet, the reported child auto restraint use has been unacceptably low. In Alaska, the rate of accidental death for children 1 to 4 years of age is 56.5 out of every 100,000, 40 percent of which are motor vehicle deaths. Three approaches are presented for protecting children from this type of accident: (1) installation of passive restraint devices and the redesign of auto interiors to make them safer, (2) the active participation of parents in the use of child auto restraints, and (3) child auto restraints legislation making such use mandatory. Legislation by itself is not the answer. Community awareness and the involvement of medical personnel who have contact with parents of children would be effective methods of teaching child auto safety. 16 references.

113
A Proposed Campaign To Increase the Use of Restraint Systems for Young Children Who Ride in Cars.
Shaw, C. E. and Fluke, D. M.
Public Health Reports 98(5):502-507, September-October 1983.

A proposed campaign to increase the use of restraint systems for young children who ride in cars is described. The innovative public awareness campaign is based on a presidential proclamation giving national priority to encouraging the correct use of child restraint systems. It would serve to increase the public's knowledge of car safety issues and increase the number of parents who provide restraint protection for their children. The proposal is unique in that it is a multidimensional approach with its main focus on children under 5 years old. Continued appeals to the adult population are advocated, but it is believed that long term results will be more significant if children are taught as well. Although local community involvement is emphasized, Federal acknowledgment of the problem of children's safety in cars and Federal support of efforts to solve this problem are necessary to reinforce the efforts of grass roots organizations. Repeated studies show that correct, consistent use of child restraint systems is a proven method of preventing many unnecessary deaths. Unfortunately, survey data show that only 25 percent of toddlers between 1 and 4 years of age are protected by child restraints when they ride in cars. 12 references.

114
The Educator's Role in Child Auto Safety.
Ward-Cottrell, J. A.
Patient Education Newsletter 8(2):1-2, April 1985.

Many adults have misconceptions concerning the safety of children in automobiles. Education should address the positive aspects — convenience, comfort, and social acceptability of safety seats. Studies have shown that success is most likely to occur when health practitioners use a combination of educational methods. Individual instruction is a fairly effective technique for assuring proper use of car safety seats. Health practitioners are able to facilitate the proper use of car safety seats by providing parents with instruction that is based on the experiences of others in the field. 12 references.

115
Car Restraints for Children — The Nurse's Role.

Weill, V. and O'Sullivan, A. L.
Oregon Nurse 48(5):5, 11, November-December 1983.

Nurses can help save lives by encouraging parents to use approved infant and toddler safety seats. Nurses working in postpartum units, well-baby clinics, physicians offices, and emergency rooms have the most opportunity and responsibility to educate and encourage parents to use safety seats. While using pamphlets can be helpful, actually having the parents practice using the car restraint is essential. With repeated, consistent use, infants and children become accustomed to restraints. Research indicates that children behave better when they ride in car seats. Emphasizing improved child behavior may provide more motivation for parental behavior change than telling negative stories about accidents. Nurses recognize that highway casualties among the very young are essentially preventable and that passing State laws, strengthening Federal standards of vehicle design, and installing passive restraints such as air bags will help reduce these statistics. 3 references.

116
Arenac County Child Passenger Restraint Program.

Gilbert, L. E.
Sterling Area Health Project, 725 E. State Street, Sterling, MI 48659.
February 1985 - December 1985.

The Arenac County (Michigan) Child Passenger Restraint Program was undertaken in response to statistics indicating that children in Arenac County face a significant risk of injury or death due to nonuse of child restraint devices. Despite the passage of a State law requiring seatbelt use, significant noncompliance has continued in Arenac County. The county population also faces barriers of low-income and low-education levels, and virtually no programs and resources promote the use of child restraints. The target population was all persons under 19 years of age and their parents, and the objective of the program was to reduce the risk of motor vehicle injury to children via a community approach of information, education, and incentives. A program coordinator was hired, and a community task force was created to develop a comprehensive, community approach to the problem. Members of various community groups, i.e., educators, health personnel, and insurance agents, were recruited. From February 1985 through December 1985, more than 2,000 children and adults in Arenac County attended educational seatbelt safety presentations which instructed them on the need and proper use of seatbelts and child safety seats. Preprogram and postprogram observations of child restraint usage are expected to confirm significant increases in correct restraint usage.

117
Beltman in Person.

DuBrey, R. J. St. Mary's Hospital, 427 Guy Park Avenue, Amsterdam, NY 12010
1981 - Continuing.

Automobile accidents are a national health problem of epidemic proportion, and they lead all other causes of death for people 44 years of age and under. St. Mary's Hospital implemented a community health education program in 1981 to address this grave problem. Overall goals of this program, Beltman, are (1) to decrease mortality and morbidity of children involved in automobile accidents and (2) to increase knowledge of a positive attitude toward use of seatbelts. Controlled investigations have confirmed consistently that seatbelts are effective in reducing injuries, yet in a 1976 Canadian Survey the researchers found that only about 25 percent of drivers had any knowledge of the life-saving benefits of safety belt use. Beltman, a member of the St. Mary's health education team, gets the message across to children, parents, and the general public. His five-point message to children about passenger safety practices is followed by asking them to urge their parents to wear safety belts. Another vital part of his activities is talking with parents of newborn infants and children under 4 years on the importance of using crash-tested safety restraints. High school students volunteer to play the role of Beltman, wearing the red cape, mask, and white belt in appearances throughout the community. Wherever he appears, a filmstrip-cassette presentation, Adventures of Beltman, is shown. After speaking with Beltman and viewing the filmstrip, children who wear seatbelts are made members of the Beltman Safety Brigade and awarded a special certificate. For children and adults, his message includes the information that most accidents involving fatalities occur within 25 minutes of home and that more than half of accidents causing death or serious injury occur in a vehicle moving less than 40 mph. In addition to other places in the community, the locations for regular appearances by Beltman are the Amsterdam Mall, where he is seen by hundreds of children and parents, and St. Mary's Hospital, where he makes lobby presentations and also visits the pediatrics unit. Nurses take ambulatory patients to the playroom for his visit; children who cannot leave their rooms are visited at bedside by Beltman and see Adventures of Beltman via closed-circuit television. Special Beltman appearances have been made at health fairs sponsored by St. Mary's and at the Hospital Auxiliary's 1982 Spring Strawberry Festival. His activities are widely covered by the news media and on special television shows. Assisting him in his public appearances are the coordinator and volunteers from the Hospital's Patient-Community Health Education unit. The Beltman program has been honored by State and county awards, and it was the subject of a nationally televised program. Anecdotal evaluation is provided by parents' accounts of being reminded to buckle seatbelts. Ongoing documented evaluation uses pre- and post-test questionnaires to measure the impact on children's knowledge and behavior. A new feature, a bumper sticker that says "Buckle That Seat Belt" has been added to the program.

See also abstract nos. 101, 102.

118

Car Safety Loaner Program.

Metzger, N. J.

Tucson Medical Center, 5301 E. Grant Road, Box 42195, Tucson, AZ 85733.

1983 - Continuing.

Arizona passed child car seat legislation in July 1983, requiring all child passengers under 4 years of age and weighing less than 40 pounds to be secured in a child car safety seat. A need was identified for enhanced community education regarding child car safety and providing easy availability of child car safety seats. Therefore, the Tucson Medical Center sponsored a community Car Safety Loaner Program to provide safety seats to the Tucson and southern Arizona communities on a loaner basis. Objectives were to (1) increase community knowledge about the legislation, (2) make seats available to all community members, (3) expand the loaner program to multiple community locations, (4) seek community involvement, and (5) decrease traffic fatalities of Arizona children. The Flynn Foundation, Marshall Foundation, Holmes Tuttle Ford, and other community organizations contributed funding for the program. Volunteers coordinated and administered the program, which has expanded from the Medical Center into eight satellite locations. Results show that over 2,700 safety seats have been loaned in 2 years. Program evaluation forms revealed the program is perceived as excellent, safe, and much needed. From 1982 to 1985 traffic fatalities of children under 5 years of age fell from 12 to 4 fatalities.

119

Child Restraint and Adult Safety Belt Public Education Project.

Hoadley, M. R.

University of South Dakota, Division of Health, Physical Education and Recreation, Dakota Dome 202, Vermillion, SD 57069.

Funding Source: South Dakota State Dept. of Commerce and Regulation, Pierre. Office of High Safety Programs.

January 1984 - Continuing.

The Child Restraint and Adult Safety Belt Public Education Project was developed by the University of South Dakota and the Clay County (South Dakota) Community Health Department to improve awareness of the benefits of child restraint and seatbelt use and to increase usage of these devices. The project has provided health education services primarily in Clay and Yankton Counties (South Dakota), and programs have been developed for age groups ranging from preschoolers to senior citizens. Personnel from the University of South Dakota and the Community Health Department have disseminated such information via "Belt Friends" educational programs and public displays to interested audiences. During the past 21 months, a total of 80 programs have been offered to 5,796 participants. Furthermore, child restraint information packets have been mailed to all parents of children born in Clay and Yankton Counties, and individuals have been identified as liaison persons in each community for promotion of restraint use and assistance in scheduling presentations. Results from this continuing program have been shared at local, State, regional, and national meetings.

120

Child Restraint Program.

McManis, B.

Alabama Department of Public Health, Bureau of Primary Prevention, State Office Building, Montgomery, AL 36130

Funding Source: Office of Highway and Traffic Safety, Montgomery, AL.

1980 - Continuing.

Since its inception in 1980, Alabama's Child Restraint Program has promoted safety for automobile passengers 5 years old and younger, its goal being to reduce child mortality and accident-related morbidity. Parents of 296,412 Alabama children are the primary target group. The first year of the program was spent in efforts to inform the public of the need for child restraints in automobiles. Public service announcements were sent to the 17 television and the 168 radio stations in the State, and 138 Alabama newspapers received an average of one news release per week. Program personnel appeared on television and radio and made presentations to prenatal classes, parenting groups, civic and professional organizations, and school classes. The program was responsible for approximately 50,000 brochures and 20,000 posters distributed statewide. Furthermore, films on child passenger safety were purchased for the Health Department's film library for public use. The second year was marked by a concerted effort to have a child restraint law passed in Alabama. Assisted by pediatricians, program personnel made several presentations to inform legislators of the need for such a law. News releases were sent to the media to stimulate public support. After passage of child restraint legislation, the program focus shifted to informing the public of the law. More than 12,000 copies of a program-developed brochure were distributed by State troopers, local health departments, and other organizations. In its third phase, the program concentrated on setting up local loan programs for child restraint devices. Assistance and financial support were provided by Kiwanis clubs, affiliates of the Federation of Women's Clubs, other civic and service organizations, pediatricians, and hospitals. Program personnel developed kits on how to set up a loan program and distributed 250 of these to civic organizations, physicians, and other interested individuals. Through 30 loan programs now established in Alabama, 4,500 child restraint devices are available to the public. At least two of these local programs have more than 500 safety seats. Usage surveys have been taken twice each year since the program has been in existence. They were distributed in four major Alabama cities at private health facilities, public health facilities, shopping centers, and daycare centers. Quantification methods include gathering statistics on mortality rates, accident reports, and the number of existing loan programs. Results available to date show that (1) usage of child restraints doubled (to 15 percent) between June 1980 and May 1983 and (2) the number of loan programs has increased from 0 to 30. Program efforts aided passage of a child restraint law in Alabama. Reductions in mortality and accidents are foreseen as resulting from the program's activities.

121

Get Caught Missoula.

Leahy, E. and Vallie, R. D.

Missoula City-County Health Department, 301 W. Alder, Missoula, MT 59801. March 1985 - February 1986.

Funding Source: Montana Highway Traffic Safety Div., Helena.

The Get Caught Missoula program is a community-based health promotion program aimed at increasing seatbelt and child restraint usage in Missoula County, Montana. The program was developed in response to data indicating that Missoula County's public health risks related to lack of occupant restraint use were even greater than those nationwide; a survey conducted in January 1985 indicated that the seatbelt use rate in Missoula County was only eight percent. The program is directed at all community residents and incorporates strategies for various age-related target groups. Program objectives and activities focus on (1) establishing a community incentive plan, (2) establishing a toddler seat rental program, (3) establishing employee incentive programs, (4) developing and implementing educational programs for three age-related target groups (adults, school-aged children, and preschool children), (5) conducting a media campaign, (6) promoting involvement of key community representatives, and (7) collecting data on seatbelt usage. The program relies primarily on incentives to encourage seatbelt use. In Missoula County, one receives a prize for getting caught wearing a seatbelt, hence the "Get Caught, Missoula" slogan. Seatbelt use in Missoula County, to date, has increased from a baseline of 8 percent to 30 percent. The Missoula City-County Health Department intends to continue many of its seatbelt promotion activities. The program was modeled after a similar incentive program in Helena, Montana.

122

Highway Robbery.

Perino, A.

Morristown Memorial Hospital, The Woman's Association, 100 Madison Avenue, Morristown, NJ 07960.

1985 - Continuing.

The Woman's Association of Morristown Memorial Hospital in Morristown, New Jersey, developed the Highway Robbery program to reduce the number of alcohol-related driving fatalities in the 17 to 24 age group. Program objectives included (1) preparation of a videotape that educates high school students about the dangers of drinking and driving in a manner that would appeal to that age group and (2) distribution of a copy of this videotape to every public and private high school in New Jersey. The project has been carried out entirely through the volunteer efforts of private individuals, community agencies, and area businesses and industries. The Prudential Insurance Company prepared the script for the 7-minute videotape and provided crew, actors, equipment, and direction in producing the videotape. The mayor, chief of police, fire chief, and rescue squad of Mendham Township contributed services, equipment, and personnel to the project. Financial contributors included the New Jersey Office of Highway Safety, the National Council on Alcoholism, and area businesses and community agencies. Nearly 600 copies of the Highway Robbery videotapes have been distributed as a gift to schools throughout New Jersey.

123

Jefferson Davis High School Incentive Program.

Bland, S.

Alabama Dept. of Public Health, 643 State Office Building, Montgomery, AL 36130.1984 - Continuing.

During 1984, in Montgomery County, Alabama, 28 percent of all motor vehicle fatalities involved persons 10 to 19 years of age. The Occupant Restraint Program, Bureau of Primary Prevention conducted a seatbelt incentive program at the Jefferson Davis High School in Montgomery County in an attempt to educate teenagers and, therefore, to indirectly increase the safety consciousness of students' families. The program sought to make using seatbelts a habit that involved no decision making. This was to be accomplished by rewarding the desired behavior with incentives. The program consisted of four phases: precampaign, educational, incentive, and postincentive. The precampaign phase was used to obtain baseline data and encourage local merchants to donate prizes to be used as rewards for using seatbelts. Bumper stickers and promotional materials were developed. An educational phase consisted of classroom discussions and viewing the film "Room to Live." During the incentive phase students were rewarded by the random distribution of prizes to those occupants who used seatbelts on selected days for a 6-month period. The postincentive phase was used to obtain completed seatbelt usage surveys and conduct two grand prize drawings. Observational surveys showed that seatbelt usage increased dramatically from the beginning of the project to its completion. At program initiation, the safety belt usage rate was 5.3 percent. The usage rate rose to 40.3 percent during the incentive phase, and after one year the usage rate was 25.4 percent. The project is slated to continue with Health Department funding, and two other school systems are conducting similar incentive programs.

124
Make Every Ride — A Safe Ride.
Sotolongo, J.
American Academy of Pediatrics, 1801 Hinman, Evanston, IL 60204
January 1981 - Continuing.

Make Every Ride — A Safe Ride, a program of the American Academy of Pediatrics, is designed to decrease automobile morbidity and mortality through encouragement of child seatbelt use. A second purpose of the program is to encourage mandatory child restraint legislation in every State. The program is directed at health professionals, parents, children, and teenagers. The primary method of achieving the program goals is development and provision of educational materials for diverse audiences.

125
National Child Passenger Safety Association.
Lawless, E. W. P.O. Box 841, Ardmore, PA 19003
1978 - Continuing.

The National Child Passenger Safety Association (NCPSA) was established in 1978 to provide a means whereby concerned individuals and groups can work together to assure the safe transportation of all children. NCPSA focuses exclusively on child passenger safety issues. Its committees actively promote (1) development of effective education programs for parents and children, (2) development of safety seats that are effective and easy to use, (3) innovative ways to reduce misuse of safety devices, (4) proper portrayal of child safety in the national media, (5) development of effective local car seat loan programs, (6) provision of free or loaned safety seats by employers, (7) innovative public policies, and (8) effective law enforcement. NCPSA, whose membership includes individual and organizational members, meets regularly to coordinate activities and share resources. NCPSA develops and distributes a wide variety of educational and promotional materials to encourage active involvement by physicians, hospitals, health departments, volunteer organizations, businesses, schools, churches, mass media, governmental agencies, law enforcement agencies, and private individuals.

126
New Hampshire Child Passenger Safety Program.
Prum, D.
New Hampshire Department of Public Health, Maternal and Child Health Bureau and Dartmouth Medical School, Hanover, NH 03756
1981 - Continuing.

Although crash-tested infant and toddler car seats have been available for 10 years, only 7 percent of infants and children are properly restrained when riding in motor vehicles. It is estimated that proper use of automotive restraints for this population would reduce fatalities and serious injuries by 90 percent and 80 percent, respectively. The State of New Hampshire took steps to protect children on the State's highways by creating the New Hampshire Child Passenger Safety Program (NHCPSP). The goals of this program are to (1) educate parents and health professionals about the proper use of child restraints, (2) make approved child restraints available at minimum cost to individuals unable to purchase them, and (3) support child passenger safety legislation. Implementation of these program components covered the years 1981-1983. Public information and education activities were initiated in 1981. These overlapped with interventions to make child restraints available through car seat loan programs. Community-based health organizations participating in NHCPSP ensure that their clients receive at least three educational interventions stressing the need and the importance of child restraints. Child passenger safety and educational materials are provided by NHCPSP. The packets include Early Ride booklets, posters, brochures, flyers, handbills, a film, and background information. The loan sites receive funds from NHCPSP to purchase car seats. They generally are rented out for 50 cents to 1 dollar per month, after a deposit is paid. In the fall of 1982, a task force representing more than 100 health professionals and community organizations led the drive for legislation requiring the use of car seats for children. The role of NHCPSP was to coordinate lobbying efforts and ensure that key people would testify. The New Hampshire Child Restraint Law was passed and became effective in June 1983. Public information and education efforts then focused on informing the general public and targeted groups about the law. The strategies used were public service announcements via radio, frequent newspaper articles and radio and television items, posters, brochures, toll-free telephone messages, information mailed to insurance subscribers, and 21 audiovisual kits distributed to groups across the State. A grant from the American Academy of Pediatrics paid for the kits. Child restraint law packets were also sent to numerous agencies, organizations, and judges. The Child Passenger Safety Program is evaluated by the program staff and its advisory board. Loan programs are monitored at training sessions and through telephone conversations, seat distribution figures, and expenditure reports. Education efforts are evaluated through local hospital records of the number of restrained infants leaving before and after intervention. NHCPSP keeps records of all requests for information and education. In some communities, the 1990 goal has already been exceeded. Health care providers may be contributing to the demand for car seats, which exceeds the number currently available for loan, by encouraging their clients to use them. Other evidence that the program has been effective includes passage of the Child Restraint Law.

TRANSPORTATION INJURIES

127
Occupant Restraint Safety Program.
McVay, J.
Alabama Department of Public Health, Bureau of Primary Prevention, 206 State Office Building, Montgomery, AL 36130
Funding Source: Office of Highway and Traffic Safety Administration (DOT), Washington, DC.
October 1979 - Continuing.

The Occupant Restraint Safety Program, a program of the Alabama Department of Public Health, Bureau of Primary Prevention, is designed to increase the use of approved car seats for infants and the use of appropriate child restraints for older children. The target population of the program is the parents of young children (0 to 5 years) who do not use car seats or child restraints for their children. The original goal was the passage of a child restraint law in the State of Alabama. After the law was passed in 1982, the primary goal became the establishment of car seat loan programs throughout the State. The car seat loan programs are designed to make car seats available at a low rental fee to parents who cannot afford to buy car seats. With the encouragement and advice of the Occupant Restraint Safety Program, restraint loan programs have increased from 2 to approximately 30. These are funded locally through civic organizations, hospitals, or childbirth education groups, so they will remain in place after the safety program is discontinued. Restraint usage has risen from 6 to 15 percent during the life of this program. A kit outlining the establishment of car seat loan programs, which includes brochures and other materials, is available through the Alabama Department of Public Health, Bureau of Primary Prevention, Montgomery, Alabama.

128
Operation Childsaver.
Magenheim, M. J. and Bumpus, E. C.
Sarasota County Public Health Unit, 2200 Ringling Boulevard, Sarasota, FL 33577.
1982 - Continuing.

Operation Childsaver was developed by the Sarasota County (Florida) Public Health Unit in response to national and local data documenting the high incidence of death and injury among young children riding without restraints in motor vehicles. The program was established with the specific goal of reducing the number of deaths and injuries to children under 5 years of age. The main program objectives closely parallel the 1990 Objectives for the Nation concerning the reduction of motor vehicle fatalities among children and the provision of public education regarding the use of child restraints. The program has two major components: (1) a community-wide awareness campaign to educate parents concerning the use of child car seats and (2) a car seat loaner program. The educational component includes public service announcements throughout the media, distribution of coloring books about car safety among young children, educational films for new and prospective parents, and physicians' prescriptions for child car safety seats. The project has been monitored by comparing yearly injury and death rates from motor vehicle accidents among young children. Not one child wearing a restraint system has been killed in a crash in Sarasota County since the inception of the program. Injuries have been reduced by two-thirds. Widespread community support and networking of services continues to make the program possible.

129
Project KISS.
Gielen, A.
Maryland Department of Health and Mental Hygiene, Health Education Center, 300 West Preston Street, Baltimore, MD 21201
Funding Source: Maryland Dept. of Transportation, Baltimore, MD.
1980 - Continuing.

In 1983, the rate of use of restraints among motor vehicle accident victims under 5 years old was 17.1 percent. The goal of this program is to increase the proper use of infant auto restraints by 50 percent. Objectives of these efforts include (1) promoting car restraint education for parents and health professionals, (2) organizing the community, (3) supporting car restraint legislation, and (4) instituting more car restraint loaner programs. To date, over 3,000 car seats are available in 59 loaner programs around the State. The mass media has participated in this campaign, and as a result women's groups and medical societies have shown interest. A resource manual and guidelines on how to establish and operate an infant and child restraint loan program is presented. The literature is geared to women expecting a child or to those with small children. Pre- and postnatal information is given for safety of both mother and child. Films are included in the educational program. Data for evaluation are collected from interviews, record reviews, and observations. These data will be reported to demonstration sites as an indicator of program effects, and will be used to make recommendations to other health departments considering participation. Questionnaires were mailed to those who participated in the car seat loaner program. Telephone followup on pre- and postnatal participants will be used to determine whether and to what degree specific prenatal attitudes, beliefs, and knowledge predict car seat usage. State police data will be analyzed to note mortality rates in child passengers in Maryland. Preliminary data indicate that approximately ten car seat loaner programs were operating in 1980. Self-report data from 89 participants show 91 percent use car seats. There seems to be a statistical bias here because most participants were in favor of using car seats before being exposed to the program.

See also abstract nos. 092, 093.7

130
Safe Ride Program.
Zane, D. F.Galveston County Health District, P. O. Box 939, La Marque, TX 77568
1983 - Continuing.

Motor vehicles kill or disable more American children than any other agent. In the Galveston Health District, 3 children were killed and 229 were injured in 1982 as a result of automobile accidents. In April 1983, the Galveston County Health District initiated a child car seat safety project, in keeping with the 1990 Objectives for the Nation of reducing premature death and disability for children. Galveston's Safe Ride Program offers education on the importance of using child restraints in moving motor vehicles and is combined with a rent-or-loan system to provide low-income families with crash-tested safety seats. Car safety education is conducted through existing programs in the community (e.g., Women, Infants and Children Program; Maternity Clinic; Well Child Conference; Public Health Nursing). In addition, regular car safety classes are offered daily at the community health center. Some methods used in the education intervention are videotapes; live demonstrations; group discussions; printed information; and Tel-Med, a free telephone health information service. Another important aspect of the Safe Ride Program is an active effort by the Health District to organize a coordinated, countywide approach to child passenger safety. Included in the network of cooperating participants are the University of Texas Medical Branch at Galveston, local hospitals, area physicians, the local Medical Society and Auxiliary, Federal and State agencies, daycare centers, local businesses, and civic organizations. The loan program, the State's largest, has 600 child restraints (infants and toddler) available to low-income families. After completing certified training, parents may pick up seats at distribution centers located throughout the county. The Health District also furnishes child passenger safety seats to other agencies regularly engaged in transporting children (e.g., Child Welfare and Health-Mental Retardation). The Safe Ride Program has received national attention, through a description published in the Community Health Connection. Other publicity vehicles have been used by the Health District to advertise its program and to heighten public awareness of the need for action to improve child passenger safety. These include articles in local newspapers, appearances on radio talk shows, and bumper stickers. A long list of community agencies and groups is appended to the program description. The Safe Ride Program will be evaluated on three levels. To measure its impact, data were collected on the number of people educated in car safety and the number of child restraints rented out. A survey was planned to determine after six months the number of Galveston County children who were not protected by a safety seat, in seats not properly used, or riding in unsafe seats. In addition, a reporting system was established whereby ambulance companies track the prevalence of child restraint use in accident cases. A general discussion of the results, prior to completion of the data analysis, indicates widespread public acceptance of the program and community endorsement of the networking approach.

• FIREARM SAFETY

131
Hunter Education: Instructor Manual. (Procedures Guide, Student Manual, Lesson Plans).
Diebold, L.; Williams, L.; Powell, C.; Staton, R. D., Jr.; and Baker, P.
Jefferson City, MO, Missouri Dept, of Conservation, (Shooting Skills Series), 202 p., 1982.
Available from: ERIC; Order No. ED-225 739.

The Missouri Department of Conservation designed the procedures guide, basic student manual, and lesson plans necessary to set up and conduct a Missouri Hunter Education Certification Course. Each module is a self-contained unit that covers one of the following topics: (1) firearms and ammunition, (2) hunting tradition and ethics, (3) the hunter and conservation, (4) firearms safety, (5) hunter responsibilities, (6) hunter preparedness, and (7) optional live firing. Lesson plans, activities, class exercises, tests, and suggested visual aids are included. The Hunter Education Program consists of a minimum of 6 hours of instruction with many courses running as long as 40 hours. The course is designed to develop students who are (1) safe with firearms in the fields and homes, (2) respectful of other people and property, (3) law-abiding, and (4) aware of the importance of hunting as a management tool for the resources of the State.

132
Hunter Education: Student Manual.
Staton, R. D., Jr.
Jefferson City, MO, Missouri Dept. of Conservation, (Shooting Skills Series), 106 p., 1982.
Available from: ERIC; Order No. ED-225 740

The Missouri Department of Conservation designed a Hunter Education Student Manual to be used in conjunction with a course or used as a self-teaching workbook. Objectives at the beginning of each chapter specify the knowledge and abilities to be attained from studying that chapter. Topics in this manual include (1) an overview, (2) firearms and ammunition, (3) hunting tradition and ethics, (4) the hunter and conservation, (5) safe firearms handling, (6) hunter responsibilities, and (7) hunter preparedness. Each chapter provides lesson objectives, detailed information on the topic, a glossary of terms, and review questions. The final sections of the manual contain instructions on the care of game (quail, dove, woodcock, turkey, pheasant, grouse, ducks, geese, squirrel, rabbit, and deer) and a final evaluation of course objectives.

• SPINAL CORD INJURIES

133
Hey, New Wheels.
Kuric, J.
Southeastern Michigan Spinal Cord Injury System, Rehabilitation Institute, Detroit Receiving Hospital and University Health Center, 261 Mack Boulevard, Room 401, Detroit, MI 48201
Funding Source: Dept. of Education, Washington, DC.
December 1, 1984 - Continuing.

The Southeastern Michigan Spinal Cord Injury System uses a slide-sound program entitled Hey, New Wheels to educate high school students on ways to prevent spinal cord injury. The film stresses seatbelt usage, sports safety, and diving safety. A program coordinator travels to high schools to present the slide-tape show and follows it with a discussion period. The optimal size for these group discussions is 75 or fewer students. The program features three high school students who talk about their injury, how it happened, and how their lives have changed. Pre- and posttests indicate that the program results in a significant degree of learning. Ongoing evaluation is taking place along with a followup study.

134
Missouri Spinal Cord Injury Prevention Program.
Cain, K. and Watts, C.
University of Missouri, Health Sciences Center, 11A Rusk, Columbia, MO 65212
Funding Source: Missouri State Div. of Health, Jefferson City; Dept. of Education, Washington, DC.
Spring 1980 - Continuing.

The Missouri Spinal Cord Injury Prevention Program, which began in the Spring of 1980, has worked to reduce the incidence of traumatic spinal cord injuries in Missouri youth. Through assembly programs, junior high and high school audiences are encouraged to change their attitudes and behaviors to prevent spinal cord injuries. The project uses speakers, a high-impact film, a wheelchair obstacle course, and a demonstration by paramedics to (1) discourage drinking and driving, (2) increase seatbelt use, (3) increase safety related behavior during high-risk activities, and (4) increase knowledge of the role of bystanders after serious accidents. Evaluation of the impact of the project has not been possible because of the difficulty in uniform reporting of spinal cord injuries. However, written ratings by students and school officials have been positive, and anecdotal evidence of bystander behavior at accident scenes has suggested that the program is effective in alerting people to the danger of moving an accident victim. Prevention of spinal cord injuries depends on heightening people's awareness of what spinal cord injury is and which situations entail high risk. 2 references.

RECREATION INJURIES

135

Spinal Cord Injury Accident Prevention-Education Program.
Ferris, B. C.
District III, Department of Health and Rehabilitative Services, Office of Vocational Rehabilitation, 1323 Winewood Boulevard, Tallahassee, FL 32301
1981 - Continuing.

The goal of this program is to make rural high school students aware of the causes of spinal cord injuries and accidents resulting from falls, gunshot wounds, speeding, or driving while under the influence of drugs or alcohol, as well as the value of seatbelt usage, proper conditioning and training for sports and recreation. The Vocational Rehabilitation staff of District III created the program's methodology using elements of other accident prevention programs. The format involved four to five 50-minute presentations over the course of the school day. This increased the program's chances of becoming a permanent part of the course curriculum. Articles in the school newspaper, local media coverage, and distribution of posters, brochures, and tee shirts helped gain exposure. Doctors, nurses and social workers participated. A victim of spinal cord injury discussed his or her personal injury in terms of personal reaction, hospital stay, and effects of the injury on lifestyle. This is followed by a question and answer period by the students. Five students from each class were chosen to fill out an evaluation form. Ninety-nine percent recommended the class to others and rated all components of the program from very good to excellent. In terms of outcome, the number of spinal cord accidents remained the same for the 16-25 age group. The project was successful in advising students what to do in case of a spinal cord injury.

136

Spinal Cord Injury High School Prevention Program.
Chilafoux, R.
Woodrow Wilson Rehabilitation Center, Spinal Cord Injury System, Fishersville, VA 22939
Funding Source: Virginia State Dept. of Rehabilitative Services, Richmond; Virginia State Div. of Motor Vehicles, Richmond.
September 1983 - Continuing.

The Spinal Cord Injury High School Prevention Program of the Woodrow Wilson Rehabilitation Center uses assembly programs to teach high school students in Virginia about head trauma and spinal cord injuries (SCI). The 60- or 90-minute programs include testimonials by speakers who have suffered these injuries, films, slides, information on the effect of seatbelt use, signs of SCI and head injury, and how to treat an accident victim. Brochures and fact sheets are distributed after the presentations. Students receive evaluation forms to comment on the program. Currently, the presentations are being modified to enhance the cooperation between offices concerned with head trauma, SCI, and the Virginia Department of Motor Vehicles.

• GENERAL RECREATION SAFETY

137

Safe-Playing Program: Final Report on Process Field Test.
Embry, D. D. and Maifetti, J. L.
Falls Church, VA, AAA Foundation for Traffic Safety, 132 p., 1932.

The American Automobile Association Foundation for Traffic Safety sponsored a study to field test of a Safe-Playing Kit in diverse centers across the country. Seventeen preschools and daycare centers from eight States participated. The Safe-Playing Kit was designed to teach preschool children to walk and ride safely while playing. Storybooks, posters, filmstrips, charts, and handbooks were used in the kit, which was divided into a classroom component and a parent involvement component. Changes in the children exposed to the kit were measured through the use of two concept probes, one before the program and one after the program. Results indicated that most teachers and parents felt the program was successful. Children who used the four storybooks showed significant increases in scores between the administration of the two concept probes. The field test showed that the Safe-Playing Kit could be used in a great variety of communities, preschools, daycare centers and facilities across the country. 10 references.

138

Injuries from Break Dancing.
Norman, R. A. and Grodin, M. A.
American Family Physician 30(4):109-112, October 1984.

Breakdancing is a form of free-style dance which combines traditional mime and complex acrobatic moves into a method of expression that has been associated with particular types of musculoskeletal and neurological problems. Breakdance back syndrome describes a condition of lower back pain and difficulty bending over after a day of breakdancing, which can be treated with rest, heat, and analgesics. Injuries from breakdancing are comparable to orthopedic injuries that occur in unsupervised athletic activities. Back, upper extremity, and lower extremity injuries are often presented to the physician. Preventive measures include practicing on four inch thick mats and performing adequate warm-up and warm-down exercises. Careful screening, instruction, supervision, and training would prevent many breakdance related problems. 10 references.

139

Reducing the Toll of Injuries in Childhood Requires Support for a Focused Research Effort.

American Academy of Pediatrics, Evanston, IL. Committee on Research and American Academy of Pediatrics, Evanston, IL. Committee on Accident and Poison Prevention.
Pediatrics 72(5):736-737, November 1983.

The American Academy of Pediatrics is committed to promoting a major initiative to reduce childhood injuries through research and application of the results of research. Injury is the leading cause of death and disability in childhood and early adult life. Certain types of childhood injuries, like poisoning and flame burns have been successfully reduced while other aspects of preventing injury have evolved slowly. Progress has been slow because trauma research is not coordinated, focused, or well funded. The American Academy of Pediatrics recommends an increased emphasis on injury research. A multidisciplinary approach would utilize the skills of professionals in fields involved with understanding and reducing the incidence and human toll of childhood injuries. Funding by private foundations and government agencies needs to be increased to support research on injury care and prevention. 12 references.

140

Environmental Safety and the Prevention of Childhood Accidents.

Brink, S.
Paper presented at the Ontario Psychological Association Conference (Ottawa, Ontario, Canada, February 2, 1982), 13 p., February 2, 1982.
Available from: ERIC: Order No. ED-217 967.

In response to the problem of childhood accidents, data are presented describing the extent of the problem in Canada. Strategies for prevention are analyzed, including the following: (1) safety training for children at home, (2) making parents aware of their responsibilities, (3) encouraging preventive design by professionals and designers, (4) reexamination of responsibilities of regulatory and consumer protection organizations, and (5) reevaluating the responsibilities of the community as a whole. Recommendations include encouraging the search for new means of safety applications, making products safer, and borrowing safety technology from other countries. 25 references.

141

Behavioral Pediatrics: Health Education in Pediatric Primary Care.

Finney, J. W. and Christophersen, E. R.
Progress in Behavior Modification 16:185-229, 1984.

This review of research literature presents the findings on the effectiveness of pediatricians in delivering health education to families with infants, toddlers, and preschoolers. It suggests that pediatricians can help reduce morbidity and mortality in childhood by educating parents on how to avoid accidents, burns, poisoning, falls, asphyxiation, and automobile injuries. They can encourage parents to (1) prevent and treat behavior problems, (2) promote child development, (3) improve dietary habits, and (4) increase adherence to medical advice. Studies that addressed the health education aspects of these topics are presented along with the research findings. Behavioral pediatrics research shows that the least effective strategies have been in increasing adherence to long term medical regimens. An emphasis on health education in the pediatrics practice reinforces the need for more training in pediatrics for physicians. Pediatricians can intervene, both directly and indirectly, to improve the health of individual children and thereby help to achieve the goal of better health for our nation's children. 144 references.

142

Assessments of a Pilot Child Playground Injury Prevention Project in New York State.

Fisher, L.; Harris, V. G.; VanBuren, J.; Quinn, J.; and DeMaio, A.
American Journal of Public Health 70(9):1000-1002, September 1980.

The New York State Department of Health conducted a pilot playground accident prevention program in cooperation with the Monroe, Onondaga, and Suffolk County Health Departments and Russell Sage College. During the fall of 1977 and 1978, 30 standardized 40-minute workshops were conducted for 1,500 professionals involved in the purchase, installation, maintenance, and supervision of public playgrounds. At the workshops factual materials were distributed, a consumer product safety commission film was shown, and certain groups did role playing exercises to identify and offer suggestions for voluntary correction following playground surveys. The public information portion of the project used radio public service announcements, newspaper articles, public exhibits, and safety leaflets. Results revealed a 17 percent increase in correct tests scores and a 42 percent reduction in average number of hazards per playground site from 1977 to 1978. Injury frequency data indicated 22.4 percent fewer injuries treated in the 1977-1978 period in two of Rochester's largest hospitals. Health professionals must translate data about the nature and extent of child injuries into active preventive programs for reductions in unsafe behavior and accidents. 14 references.

143

The Incidence of Injuries Among 87,000 Massachusetts Children and Adolescents: Results of the 1980-81 Statewide Childhood Injury Prevention Program Surveillance System.

Gallagher, S. S.; Finison, K.; Guyer, B.; and Goodenough, S.
American Journal of Public Health 74(12):1340-1347, December 1984.

Through the Statewide Childhood Injury Prevention Program (SCIPP), the Division of Family Health Services of the Massachusetts Department of Public Health conducted an epidemiological analysis of the incidence of fatal and nonfatal injuries occurring in 87,022 Massachusetts children and adolescents (0-19 years) between September 1, 1980 and August 31, 1981. A surveillance system composed of 23 hospitals monitored activities and collected data for three levels of injury severity. Injury rates varied by age, sex, and level of severity. Infants and older teenagers experienced the highest injury rates, and males had greater injury rates than females. For all ages combined, falls were the most common cause of injury. Age and development related injury patterns appeared. These have implications for health care providers who must target against high-incidence injuries. Health care providers must pay more attention to causal factors, encourage the uniform collection of data, expand national databases, and encourage appropriate funding to facilitate further research and identify prevention measures. 20 references.

See also abstract nos. 023, 144

144

A Strategy for the Reduction of Childhood Injuries in Massachusetts: SCIPP.

Gallagher, S. S.; Guyer, B.; Kotelchuck, M.; Bass, J.; Lovejoy, F. H., Jr.; McLoughlin, E.; and Mehta, K. A.

New England Journal of Medicine 307(16):1015-1019, October 14, 1982.

The Massachusetts Department of Public Health (MDPH) developed the Statewide Childhood Injury Prevention Program (SCIPP) to (1) study the epidemiology of childhood injuries, (2) implement methods to reduce injuries at different age levels, (3) coordinate efforts to prevent childhood injuries statewide, and (4) develop a comprehensive set of legislation. The SCIPP injury surveillance system was designed to collect data on all types of injuries at several levels of severity. SCIPP coordinated five projects focusing on specific risks of injury in various stages of a child's development. The publication of SCIPP reports and the formation of an advisory committee with statewide representation should reinforce efforts to build a constituency for injury prevention. This can in turn promote supportive legislation, increase the dissemination of information, encourage the education of medical professionals, and maintain preventive activities beyond the duration of the project. Baseline epidemiological data reveals specific details on mortality, hospital admissions, and emergency room treatment. The MDPH developed SCIPP to serve as a model and incentive to other States to develop strategies for the prevention of childhood injuries. 22 references.

See also abstract nos. 023, 143

145

Safety: Catching Them Young.

Glendon, A. I. and McKenna, S. P.

Occupational Health (London) 34(11):517-520, November 1982.

The Department of Occupational Health and Safety at Aston University conducted research to evaluate the effect of First Aid Community Training (FACT) carried out in Leek, Staffordshire. Questionnaires were sent out to all volunteer participants aged 18 or under (more than 20 percent of the group) and of the 263 sent out, 57 percent were usable. The survey showed that 38 percent of the respondents imparted information about first aid treatments to their families and friends after the course. Most respondents were confident they could respond quite well in an emergency. Opinions about the course were generally favorable although some (less than half) suggested making the course more practical or detailed. The survey showed that young people were receptive to the FACT project and derived benefit from the course. The authors conclude that the FACT courses combined with safety instruction can be a valuable tool to instill healthy and safe perspectives among people if they are taught at an early age. 3 references.

146

Knowledge of Accident Prevention Among Parents of Young Children in Nine Massachusetts Towns.

Halperin, S. F.; Bass, J. L.; and Mehta, K. A.

Public Health Reports 98(6):548-552, November-December 1983.

Knowledge concerning childhood accident prevention was assessed among parents of young children in nine Massachusetts towns. Parents completed safety surveys during their child's health maintenance visits at primary care sites. A total of 1,493 parents in urban, suburban, and rural Massachusetts communities participated. The questionnaires were administered, between September 1980 and June 1982, to 512 parents of infants under 9 months and to 981 parents of children aged 9 months through 5 years. Parents in all nine locations needed to learn how to prevent their children from getting burns. A variety of community-specific needs for other types of preventive behavior also were identified. Recognition of these educational needs is important, since individual counseling or community education programs may be the only feasible preventive measures for certain injuries, particularly those that require parents to make substantial behavioral changes. 8 references.

147

Unintentional Injuries Among Adolescents and Young Adults: A Review and Analysis.

Halperin, S. F.; Bass, J. L.; Mehta, K. A.; and Betts, K. D.

Journal of Adolescent Health Care 4(4):275-281, December 1983.

A review of the literature presents data on the problem of unintentional injuries among adolescents and young adults. A comparison is also made of the educational deficits of adolescents responding to the surveys with available data by type of injury. Fatal accidents among adolescents in 1980, in order of occurrence, were motor vehicle accidents, drownings, poisonings, firearm injuries, burns, and falls. Most teen accident victims are males. Alcohol or substance abuse are important contributors to many accidents. The vulnerability of young adults may be caused by developmental instability and fluctuating moods. Health education has sometimes had a negative effect on mortality. For example, driver education results in putting more teens on the road and drug education may tempt the adolescent to perform activities opposite to those intended. Educating children about accident prevention during early childhood may be more effective. Legislative changes and other passive measures are the most likely to have impact. 46 references.

148

Does Health Education Prevent Childhood Accidents?

Minchom, P. E.; Sibert, J. R.; Newcombe, R. G.; and Bowley, M. A.

Postgraduate Medical Journal 60(702):260-262, April 1984.

The effect of a short health education program directed at parents and children in Ely, an area of Cardiff, Wales, was studied. Using conventional health education practices, the campaign ran in June and July 1981 and was monitored by the numbers of injured children attending the local Accident and Emergency Department. Leaflets, posters in shops, lectures, quiz games, informal discussions, and school visits were employed. A comparison of the accident numbers before and after showed no significant change. A slight increase in trivial injuries suggested an increased willingness to go to the hospital. There was no age distribution change in the victims. Since health education did not appear to change behavior, the suggestion was made to adjust the environment. Examples of this approach are (1) use of child resistant containers, (2) use of flame-resistant nightwear, and (3) safety changes in bicycle design. The authors suggest that further resources should not be spent on health education to prevent childhood accidents without proper evaluation and much thought. 5 references.

149

The McMaster School Injury Study. 1: Overview of Methods.

Woodward, C. A.; Feldman, W.; Feldman, E.; Hodgson, C.; and Milner, R.

Canadian Journal of Public Health (Ottowa) 74(4):276-280, July-August 1983.

Methods and purposes of the McMaster School Injuries Study are outlined in order to facilitate understanding and encourage needed research in the area of school injury. Data collected from three boards of education in the Hamilton-Wentworth Region of Southern Ontario, Canada, provided information on the incidence, nature, circumstances, and sequelae of school associated accidental injuries. A random sample of 50 schools representing the entire socioeconomic spectrum were monitored. The McMaster School Injuries Study (1) used several data sources (schools, board records, parents), (2) developed questionnaires and report forms, (3) created standardized accident categories, (4) minimized open ended responses, and (5) tailored information requests to data source potential. The Scientific Information Retrieval database was used to create and maintain data files, while SPSS (Statistical Package for the Social Sciences) was used for performing analyses. 9 references.

150

Prevention of Childhood Injuries.

Baker, S. P.

Medical Journal of Australia (Sydney) 1(10):466, 468-470, May 17, 1980.

A number of factors determine whether or not an available childhood accident prevention measure will be used. The measures that have proven the most successful are those that never require any action by the child or the family. These are passive measures that have been designed into the product or the environment. The least effective are those measures requiring frequent action. Amount of effort required is also a factor. Those measures requiring the least effort are more likely to be used than those requiring a substantial effort. Other deterrents such as cost, delay, discomfort, negative self image, and sacrifice of pleasures also can keep a measure from being widely applied. Strictly enforced laws, however, can serve as incentives to elicit repeated and prolonged cooperation. Correct usage and back-up protection are also factors that influence accident prevention. Preventive measures must be (1) based on the best available information, (2) carefully evaluated, and (3) utilized with a mixture of approaches. 35 references.

151

Childhood Injuries: the Community Approach to Prevention.

Baker, S. P.

Journal of Public Health Policy 2(3):235-246, September 1981.

The effectiveness of preventing childhood injuries depends on (1) the frequency with which action is required of individuals, (2) the amount of effort required each time a child is protected, (3) other deterrents or incentives, and (4) correct use of mechanical safeguards. Too frequently, people are taught to protect themselves and their children with bothersome, repetitive behaviors, without proper incentives to learn safety skills. Whenever such educational efforts have been evaluated, they have been shown to be unsuccessful. Fortunately, some enlightened health educators are beginning to try to alter the behavior of designers, manufacturers, planners, legislators, regulators, members of the judiciary, and other people whose decisions determine the probability of injury for thousands of people. The technology is now available to prevent many childhood injuries, yet thousands of children are injured daily in ways that are entirely predictable and easily preventable through community approaches. Preventive efforts must be based on the best available knowledge of what will be effective, both now and in the future, in the most cost-effective way possible. 17 references.

152

Use of Education in Preventing Injuries.

Bergman, A. B.

Pediatrics Clinics in North America 29(2):331-338, April 1982.

Anticipatory guidance in the prevention of childhood accidents is currently viewed as a cornerstone of pediatric practice. However, the actions taken by government, corporations, and regulatory agencies have a greater impact on reducing childhood accidents than the guidance of physicians. Because the traditional health education technique of simply imparting information or statistics seems to have little impact, safety strategies already utilized to prevent accidents are examined by the author. Among those highlighted are automatic methods or active strategies that work with no action required, as well as comprehensive approaches, interventions related to the developmental level of the child, and one-time activities. These methods illustrate how auto and home safety and the prevention of burns can be accomplished. Recommendations include stressing that community education is more effective in sparing large numbers of children from accidents than consultations in the physician's office. Further research would be useful in determining methods for motivating patients to take safety-related actions to protect themselves and their families. Because the cumulative mortality and morbidity from childhood injuries is so great, physicians must continue to counsel individual patients. 22 references.

153

Organizations Concerned with Child Accident Prevention.

Child Accident Prevention Committee, London (England).

London, the Committee (Occasional Paper No. 1) 44 p., March 1981.

The Child Accident Prevention Committee provides a directory of organizations in the United Kingdom concerned with child accidents and their prevention. In addition to providing the address and telephone number, the list includes the name of a contact person, a synopsis of the group's aims and activities, and its publications. The target audience is professionals working in the fields of health, planning, education, environmental health, safety education, youth work and child welfare, voluntary groups, and parents.

154

Register of Research into Child Accident Prevention.

Child Accident Prevention Trust, London (England).

London, the Trust, (Occasional Paper; No. 5), 36 p., May 1984.

The Child Accident Prevention Trust collected information on completed and ongoing research performed in relation to childhood accidents in the home, on the road, and at play. Information sheets completed by researchers provide a brief description of each project, sponsors, researchers, and publications relating to the project. The directory is for groups and individuals working in the area of child accidents. Areas covered include (1) epidemiology, (2) child development and accidents, (3) methodological issues in accident research, (4) occurrence of specific risk factors, (5) social and psychological factors, (6) contribution of housing and the environment, and (7) severity of injury and long term consequences. Future volumes will be used to update this directory of researchers in the field of childhood accidents.

155

The Child Accident Prevention Centre, Melbourne.

Clarke, A. M. and Keogh, E. J.

Australian Paediatric Journal (Melbourne) 18(4):257, December 1982.

The Child Accident Prevention Centre in Melbourne, Australia functions with the philosophy that most accidents are preventable. To promote this philosophy the center has developed a visual exhibition that includes displays, model rooms, and clinical photographs to illustrate the variety of accidents, their cause, and usual results. The target audience consists mainly of school students; however, the center also teaches trainee nurses, dental and medical students, as well as practicing nurses and physicians. Voluntary contributions were used to equip the center which received no government financial support. The center recently hired a lecturer to speak to groups in the business community. The Child Accident Prevention Foundation of Australia has encouraged children's hospitals in State capital cities to establish accident prevention centers to involve hospitals in outreach services and help reduce childhood accidents.

156

Child Safety Is No Accident.

Cohen, D.

Medical Journal of Australia (Sydney) 140(13):756-757, June 23, 1984.

The Child Accident Prevention Foundation of Australia (CAPFA) advises and assists local organizations actively devoted to childhood accident prevention. CAPFA helps such groups plan and develop safety programs and organizes national seminars. In addition, the Foundation publishes and distributes safety literature and is developing a reference collection on child safety. Many factors contribute to the high number of accidents to children. These include (1) the dogma of inevitability which states that accidents must happen, (2) the lack of coordination and liaison between governmental and nongovernmental groups devoted to the problem, and (3) a lack of adequate mortality and morbidity data relating to accidents. Groups interested in reducing the number of accidents must realize that certain children are more vulnerable than others, the association between stress and accidents is significant, and a significant proportion of injuries in children presented at hospitals are the result of child abuse. To reduce childhood accidents it is recommended that (1) groups work to better coordinate their activities; (2) education be provided to parents, children, and teachers; and (3) responsibility be accepted, both individually and collectively, for the safety of all children. 9 references.

157

"It's No Accident": A Consumer Project Safety Education Curriculum Resource Guide for Teachers of Grades 3 Through 6.

Consumer Project Safety Commission, Washington, DC.

Washington, DC, the Commission, 117 p., [1984?].

Available from: GPO; Stock No. 052-011-00242-9.

The Consumer Product Safety Commission developed this curriculum guide to provide teachers with product safety information that can be taught to young children in grades three through six. Eight separate units discuss (1) basic safety concepts; (2) home fire safety; (3) playground safety; (4) bicycle, roller skate, and skateboard safety; (5) poison prevention; (6) toy safety; (7) holiday safety; and (8) electrical safety. The guide suggests participatory activities to introduce students to safety principles. It also teaches them how to apply these principles and to share their knowledge with others. Activities include using quizzes, home safety inspections, puppet shows, scrap books, safety crossword puzzles, songs, guest speakers, films, role playing, field trips, and home-based projects. A teacher resource information section contains information to be transmitted to students. The commission believes that an awareness of the hazards potentially associated with products a child uses and an understanding of the steps that can be taken to prevent accidents should be a part of every child's education. Since children cannot be completely protected, they must assume responsibility and acquire safe habits that will help them to protect themselves.

158

Child Safety Program.

Dewey, M. J.

Journal of the Tennessee Medical Association 76(1):39-40, January 1983.

The Child Safety Program of the Tennessee Department of Public Health is a contact point and resource center for Tennesseeans who need information regarding child safety issues. The majority of current health problems are related to lifestyle and thus can be changed by individual behavior rather than through better medical services. The State of Tennessee has legislated that children under 4 years of age must ride in a safety seat. The medical community and social and civic groups have worked to strengthen this law and its enforcement. The six leading causes of death to Tennessee children are suffocation and choking, fires, falls, drownings, poisonings, and firearm accidents. Tap water scalds and the increased use of minibikes are also areas of concern that will require intervention in order to decrease accident occurrences.

159

Prevention of Childhood Injuries.

Greensher, J.

Pediatrics 74(5,Pt. 2):970-975, November 1984.

Accidents account for more deaths among children from 1 to 14 years old than from the next five most common causes. Because of this, causal factors must be identified and removed, and parents and children must be educated about injury prevention. Considering accidents as unavoidable occurrences is a barrier to injury prevention. Current thought is that each accident has a host, an environment, and an agent. Since different problems occur at different stages of a child's development, protection should be tailored to age specific risks. The activities of the American Academy of Pediatrics focused attention on childhood injuries and ultimately led to legislation and regulations to reduce their incidence. The group has made parents and pediatricians more aware of injury prevention measures. In addition, a preventive approach must be tailored to each particular type of injury. For example, auto injuries, bicycle injuries, drowning, and injury from animals each have a host, an environment, or an agent that can be altered to prevent childhood injury. 9 references.

160
How to Prevent Accidents.
Holroyd, H. J.
Pediatric Annals 12(10):726-727, 730-731, October 1983.

Primary prevention of injury to children involves providing intervention at the level of the injury producing agent or vehicle, the susceptible host or victim, or the hazardous environment. Anticipating prevention through programs like The Injury Prevention Program (TIPP) targets risks and developmental age-related accidents. Education, engineering, and enforcement can help efforts to produce safer products and their appropriate use. Targeting high-risk potentials and enrolling single act measures achieve best results. Intervening in environmental factors means writing, passing, and enforcing laws that contribute to protection. Pediatricians have the opportunity and responsibility to intervene in the injury process. Pediatricians have the understanding of etiology, the research to back it up, the knowledge of strategies, and opportunities to teach parents, educators, and legislators about injury prevention. An appendix presents Haddon's options for intervention. 6 references.

See also abstract nos. 165, 170, 174, 193.

161
Accidental Injury.
Hughes, M. M.
JEN, Journal of Emergency Nursing 9(5):274-275, September-October 1983.

The Rainbow Babies and Childrens Hospital in Cleveland, Ohio, uses a Rainbow Reminder instruction sheet that identifies frequent causes of childhood accidents and clearly and succinctly emphasizes preventive measures. These accidental injury information sheets stress the prevention of injuries from falls, cars, scald burns, electrical burns, fires, and dangerous items that should be locked up. At the time of discharge from the hospital, a nurse reviews the instruction sheets with the parent-caregiver and provides the opportunity for discussion. It is paramount that parents-caregivers be educated in accidental injury prevention because accidents are a leading cause of childhood injury.

162
Play It Safe: A Campaign for the Prevention of Children's Accidents.
Jackson, R. H.
Community Development Journal (Oxford) 18(2):172-176, April 1983.

The Play It Safe campaign is a multidisciplinary approach to accident prevention in the United Kingdom. The campaign consisted of three components. A television series of 10 programs, each 10-minutes long, was hosted by a well-known television personality. Each program dealt with a different type of childhood accident and used interviews with parents and children who had experienced the actual accident. The second component was a Play It Safe booklet that discussed each type of accident highlighted in the television series. In addition, a chapter on choking and suffocation was included along with first aid advice and additional references. The third component was the establishment of local groups to organize events and encourage community participation. Programs were aimed at adults, but children were also encouraged to participate. Audience research and local studies were used to evaluate the campaign. Ninety-six percent of the adult viewers found the television series interesting. Ninety-nine percent of those who wrote for the booklet found it useful. There was some indication of a slight change in people's attitudes towards child safety after the campaign. It is important that data be accurately collected to reflect the actual number of children's accidents. Continued stimulation of concern and interest in the problem will help cause environmental alterations. The continuation of local accident-prevention groups is also of paramount importance to reduce childhood accidents. 2 references.

See also abstract nos. 016, 163, 195.

163
The Child Accident Prevention Trust.
Jackson, R. H. and Gaffin, J.
Archives of Disease in Childhood (London) 58(12):1031-1033, December 1983.

The Child Accident Prevention Trust (CAPT) was established in Great Britain with the goal of bringing together people from the many disciplines and professions concerned with childhood accident prevention. After the age of 1, accidents are the largest single cause of death and morbidity in childhood, so CAPT acts as a scientific advisory and coordinating body with the goal of reducing these occurrences. The CAPT functions by issuing reports on specific problems that aim to influence policy, and by taking selective educational approaches. Working parties of experts who are from the group's own membership and from other institutions have published reports on accident prevention organizations, auto passenger safety, architectural glass accidents to children, and disability and handicap arising from accidents. Current work of these groups includes investigating scalds and burns, setting up local initiatives in childhood accident prevention, and establishing data collection techniques. The Play It Safe campaign on BBC television was the primary educational component. The CAPT acts as liaison with other groups in the field and has close links with many international organizations. 1 reference.

See also abstract nos. 016, 162, 195.

164

Prevention: What is Happening in South Australia.

Kirkham, S.

Australasian Nurses Journal (Port Adelaide) 9(12):20, November 1980.

Southern Australia utilizes a number of approaches to help prevent burn injuries in children. Education, research, and legislation are being carried out to help reduce the number of accidents. Students in nursing, medicine, and architecture receive safety lectures on aspects relevant to their respective fields. Secondary schools include safety education as part of the curriculum. Speakers from the National Safety Council of Australia, as well as parents of burn victims, give lectures and presentations to the public. Research workers coordinate their work to avoid repetition and share results on the effectiveness of various methodologies. Foundations and hospitals are taking part in targeting special areas, such as safety in the home. In the past 15 years, legislation has been passed in areas affecting childhood burn injuries, including new safety measures for radiators, labeling children's nightwear, and banning fireworks. Safety education should begin at an early age, with continuous programs during the school years, so children will develop a healthy attitude and safe habits.

165

TIPP Usage.

Krassner, L.

Pediatrics 74(5,Pt. 2):976-980, November 1984.

Anticipatory guidance in the prevention of childhood accidents is an essential part of pediatric practice. The Injury Prevention Program (TIPP) deals with the major causes of childhood mortality. TIPP includes (1) a parent questionnaire (the Framingham safety survey) to identify at-risk behavior, (2) safety sheets that reinforce information provided by the physician, and (3) a model counseling schedule on how to incorporate the questionnaire and safety sheets into an effective office program. TIPP should be gradually phased into a practice so that it can be integrated in a controlled manner. It may take more than 6 months to disseminate age-appropriate materials to each patient. The American Academy of Pediatrics Committee on Accident and Poison Prevention is considering measures such as a teaching package to introduce the topic to medical students, a videotape for meetings, and translation of TIPP materials into Spanish to increase the program's usefulness. It is appropriate that pediatricians focus attention on healthful changes in lifestyle at the critical time of life when lifestyle is being molded.

See also abstract nos. 160, 170, 174, 193.

166

Introduction to Preventive Pediatrics.

Lovejoy, F. H., Jr.

Pediatrics 74(5, Pt. 2):958-960, November 1984.

In order to prepare for their unique role in educating parents about childhood accident prevention, pediatricians need to become knowledgeable about the epidemiology of accidents, learn about models for accident prevention, and become aware of the potential scope of their involvement in preventing accidents. Included among the areas that would utilize the pediatrician's skills are (1) patient education, (2) teaching, (3) regulation, (4) product engineering and manufacturing, (5) reporting and monitoring incidents, (6) participation in committee activities, and (7) cooperation with the media. Pediatricians can use a variety of techniques and perspectives to work with the nonmedical community to implement meaningful accident prevention efforts. 1 reference.

167

Accidents in Childhood: Growing to Independence.

Maddocks, G.

Nursing Mirror (Sussex) 152(21):viii-xiv, May 20, 1981.

Schoolchildren should be encouraged to be wary of environmental risks. The positive relationship of injury percentages with age is based mainly on the increase in sports participation. Forty-five percent of injuries occurring during the school day happen on the playground. Five percent of injuries in the 10- to 14-year-old age group involve bicycles. Sporting injuries increase during the teenage years, when rivalry becomes significant, particularly among boys. For parents, the most profitable teaching strategy probably is to combine nagging with example setting and explanations. Along with efforts to create a safer environment, health educators must teach the necessary skills that enable children to live an independent, safe existence. The teaching of road safety, now a well recognized and respected part of children's school life, is only a small part of the safety education that children should receive.

168

Accidents in Childhood: Careful-Don't Touch!

Maddocks, G.

Nursing Mirror (Sussex) 152(21):ii-iv, May 20, 1981.

Preventive measures and increased awareness among parents and other child care providers can significantly reduce the extent of accidental injury. Accidents are currently the major cause of death in children over 1 year old and an important cause of death in younger children. Virtually all children are urged to be aware of their environment. Nevertheless, many suffer injuries and some die. This reflects the imbalance among parental protection, the child's need for independence, and the child's limited ability to cope with the dangers of the environment. Increased parental education about safety and first aid should be provided. Doctors and nurses are urged to make comments to parents and staff that will increase awareness of their responsibilities toward children.

169

Accidental Policy: An Analysis of the Problem of Unintended Injuries of Childhood.

Margolis, L. H. and Runyan, C. W.

American Journal of Orthopsychiatry 53(4):629-644, October 1983.

A method of analyzing policies dealing with unintended childhood injuries is developed to initiate an ecological public health perspective that includes a range of preventive and ameliorative strategies. This perspective incorporates three dimensions: (1) the host, (2) the agent, and (3) the social and physical environments. Alternative prevention strategies applied to the model include pre-event, event, and postevent phases of prevention. In evaluating these alternative strategies to reducing unintended childhood injuries, the efficiency, freedom of choice, and equity must be assessed as evaluation criteria. Difficulties are inherent in formulating policies to address childhood accidents, and solutions must be examined within the context of the broader social policy. To reduce childhood accidents, policymakers and citizens must clearly define the problems, formulate strategies within the public health framework, and develop the criteria that are used to make decisions. 46 references.

170

The Pediatrician as Advocate.

Micik, S. H. and Alpert, J. J.

Pediatric Clinics of North America 32(1):243-249, February 1985.

The pediatrician is in a special position to act as advocate for preventing injuries to children. Incorporating education on injury prevention into health care is an accepted standard of pediatric care. Numerous studies have shown that pediatrician's counseling and education can make a difference in preventing injuries. The American Academy of Pediatrics developed The Injury Prevention Program (TIPP) to address the injury problem on a national level. Secondary injury prevention can also be enhanced by the physician providing appropriate treatment for injuries in order to prevent further damage and disability. The pediatrician can act as advocate by using professional credibility to influence community efforts, to teach future physicians and health care providers, and to help design and develop trauma centers. The most powerful role is in developing and supporting legislation and regulatory intervention in injury control. Fewer childhood injuries may result if pediatricians act as advocates for children in the family, community, and the legislature. 21 references.

See also abstract nos. 160, 165, 174, 193.

171

Injury Prevention in the Community: A Systems Approach.

Micik, S. H. and Miclette, M.

Pediatric Clinics of North America 32(1):251-265, February 1985.

To show that the systems approach can be applied on a regional level and to establish a national focus for injury prevention, the systems approach to injury prevention, current concepts in injury control, and the key components of a community-based injury prevention program are presented. The systems approach encompasses analysis, design, development, implementation, and evaluation phases. A lead agency is needed to (1) coordinate efforts; (2) analyze data on accidents under its jurisdiction; and (3) target the population, injuries, and intervention techniques. Prevention strategies are designed based on the concept of injury as a disease caused by the interaction of an agent, host, and environment. Implementation of the injury prevention system requires (1) the mobilization of regional resources, (2) the designing of written protocols and educational materials, and (3) frequent reinforcement of the targeted messages through use of the media. Legislation, monitoring, and evaluation are final steps in applying the systems approach to coordinate medical, governmental, and community resources for injury prevention. 26 references.

172

Resource Unit on Health and Safety Education, Grades K-12.

Minnesota State Dept. of Education, St. Paul. Div. of Instruction. White Bear Lake, MN, Minnesota Curriculum Services Center, 125 p., Spring 1977.

The Minnesota Department of Education Division of Instruction has developed a manual for health and safety education. The manual includes (1) a statement of the purpose of the document, (2) a definition of health education, (3) discussion of changing needs in health education, (4) a statement of basic essentials for school health education in Minnesota, (5) criteria for program development, (6) suggested steps in developing a local health education curriculum, and (7) health and safety education resource units for four grade levels (K-3, 4-6, 7-9, and 10-12). Unit topics are (1) consumer health, (2) diseases, (3) drug education, (4) family life and sex education, (5) growth and development, (6) mental health, (7) nutrition, (8) dental health, (9) personal health, and (10) safety and first aid. Each resource unit contains information about concepts and subconcepts to be taught, desired student outcomes, sample activities, and references for printed and audiovisual materials.

GENERAL SAFETY EDUCATION

173
Personal Safety: Instructor Material and Student Material.
Missouri Univ., Columbia. Instructional Materials Lab.
Columbia, MO, the Lab (Cooperative Occupational Education; Unit 18), 38 p., 1983.
Available from: ERIC; Order No. ED-234 257.

A set of instructional materials to be used in the personal safety unit of a course offered in a Missouri secondary school is presented. The course, entitled Cooperative Occupational Education, is designed for students with special needs. The personal safety unit stresses the importance to students of taking care of themselves by (1) maintaining good health, (2) avoiding accidents, and (3) making wise choices about the use of alcohol and drugs. Materials for instructors include (1) a unit objective, (2) specific objectives, (3) suggested activities, (4) an outline of information provided in the student instructional materials, (5) illustrated transparency masters, (6) a key to the unit review, and (7) references. The student materials are illustrated, and contain (1) objectives; (2) an introduction; (3) information sheets; (4) assignment sheets with activities such as matching exercises, quizzes, and puzzles; and (5) a unit review. 6 references.

174
Prevention of Childhood Injuries: Morbidity and Mortality — An Overview.
Mofenson, H. C. and Wheatley, G. M.
Pediatric Annals 12(10):716-719, October 1983.

Because accident prevention is an essential component of child health supervision, major accident threats to children are reviewed here and practitioners are given help with prevention. The target audience consists of pediatricians and others responsible for providing medical care to children. The Injury Prevention Program (TIPP), developed by the Accident Prevention Committee of the American Academy of Pediatrics, provides physicians with a framework to help protect young children from accidental injury. While this program will be helpful to preschoolers, other age groups must also be protected. Adolescents have specific problems that are often alcohol or drug related. One of the tasks of the pediatrician is to address medical needs and detect depression. Research has shown that some traumatic tragedies have masqueraded as accidents but actually have been incidences of abuse or illness. Pediatricians can help reduce accidents by identifying the at-risk child, pointing out environmental hazards, emphasizing prevention, being aware that some injuries are intentional, and learning to understand and identify the particular problems of adolescents. 9 references.

See also abstract nos. 160, 165, 170, 193.

175
Pediatric Accident Prevention.
O'Shea, J. S.; Collins, E. W.; and Butler, C. B.
Clinical Pediatrics 21(5):290-297, May 1982.

Despite attempts at prevention by industry, health workers, educators, and legislators, accidents remain a major health problem for children of all ages. They are the main cause of death in children over the age of 1 year. Children under this age have about as many serious accidents as older children, especially in automobiles and bathtubs. In order of decreasing frequency, serious pediatric accidents are caused by moving vehicles, water, burns, falls, and poisonings. Sweden and West Germany have begun national committees on childhood accident prevention. In North America, various medical groups have become concerned with accident prevention and are beginning to work directly with other groups involved with childhood accidents, such as toy and appliance manufacturers and the insurance industry. Data are beginning to emerge concerning the efficacy of different legislative and educational approaches and about risk factors for childhood accidents. 33 references.

176
The Politics of Safety.
Paine, C.
Learning 12(8):77-80, 82, March 1984.

This teaching unit provides the resources and background information a teacher needs to begin classroom exploration of motor vehicle safety. A chronology of the Federal government's activities regarding automobile safety, especially seatbelt use, is presented. Classroom activities are recommended and resources suggested for additional information. Students should be encouraged to (1) understand how concerned citizens gather information, (2) consider opposing opinions, (3) come to conclusions, and (4) act on their own beliefs. This unit helps students to accomplish these activities by focusing on the issue of motor vehicle safety. 46 references.

177
Injury Prevention in Children.
Paulson, J. A.
Journal of Family Practice 13(1):123-124, July 1981.

A change in emphasis from active to passive intervention techniques of injury control is proposed in an effort to reduce childhood morbidity and mortality. An active control measure is directed at changing human behavior and requires the cooperation of many individuals on multiple occasions. The automobile seatbelt is an example of an active safety technique. A passive control measure changes the environment and requires the cooperation of relatively few individuals on a few occasions. The air bag is a passive measure. Many active attempts have been made unsuccessfully to teach parents about safety. Passive interventions have decreased childhood injuries in a number of safety areas in various countries. In Great Britain child resistant containers prevent poisonings, while in Denmark scald burns were prevented by requiring a redesign of washing machine doors and a particular coffee maker filter. The more passive the intervention the more successful it has been. People interested in safety must reorient their thinking to emphasize the passive approach to injury prevention. 13 references.

GENERAL SAFETY EDUCATION

178
Advocacy for Safety Education. The Doctor's Role.
Pearn, J.
Medical Journal of Australia (Sydney) 140(9):537-539, April 28, 1984.

The prevention of children's accidents is a most important theme for doctors. Accident prevention has traditionally taken three approaches: education, design improvement, and legislation. Education has traditionally been the approach most often used, even though its role remains controversial. Some communities feel that the potentials of safety education are still untapped. Others feel that it is not worth the effort. In Australia, all primary schools offer an instruction module on safety and accident prevention. These classes have some inadequacies in relation to course content and allocation of time. There is a national trend towards local school autonomy of curriculum content; however, local doctors have the responsibility to act as expert advocates of and advisers on health education. Physicians should verify that the level of course work taught is appropriate for the child and that it will help the child develop a positive attitude toward accident prevention. Doctors have a responsibility to ensure that safety topics are a part of every child's education. 17 references.

179
The Prevention of Childhood Accidents: Design, Education and Legislation.
Pearn, J. Glebe,
NSW, Australian Medical Publishing Company, 96 p., 1982.

The former International Year of the Child Childhood Accident Prevention Committee and the Child Accident Prevention Foundation of Australia produced this book to bring together reference data on safety legislation, improvement in design, and education in the prevention of childhood accidents. The prevention of accidents is a responsibility of all members of society who can approach prevention from these three primary points of view: legislation, design improvement, and education. The articles presented assume these perspectives when discussing the systems approach to motor vehicle safety, pedestrian safety, bicycle safety, child restraint systems, poisoning, safety centers, media safety campaigns, prevention of nonaccidental injury to children, and safety legislation itself. Appendices present the Australian standards related to childhood accident prevention and a list of child safety legislation in Australia. 171 references.

180
Injury Prevention: The Pediatrician as Child Advocate (Editorial).
Rivara, F. P.
Journal of Developmental and Behavioral Pediatrics 2(4):160-162, December 1981.

The role of the pediatrician in preventing children's injuries is discussed. Although injuries have become the leading cause of death in the age group from just before the first birthday to 34 years, pediatricians devote little time to counseling parents on injury prevention. Definite patterns and nonrandom distributions indicate that injuries are not accidents and attention can therefore be focused on specific preventive efforts. Pediatricians can be effective in making the child's environment safer. This can be accomplished at the office level by parental education, at the local community level by influencing the community's approach to childhood injury prevention, at the State level by influencing legislation and regulation, and at the National level by petitioning the Consumer Product Safety Commission. The scope for injury prevention is vast and the opportunities to achieve the desired results are varied. 6 references.

181
Preventing Accidents and Injuries in Children.
Schulkind, M. L.
American Family Physician 28(3):240-245, September 1983.

The physician's role in preventing childhood accidents and injuries is to counsel parents to make appropriate decisions for their children without fostering parental anxiety and overprotectiveness. A developmental approach bases prevention on the child's age and development. Since motor vehicle accidents are the major cause of injury and disability, parents should be counseled prior to delivery and thereafter on the appropriate use of infant automobile restraints. Using a proper crib, lowering water temperature to 48.9 to 54.4 degrees C, choosing appropriate toys, and removing poisons and hazardous objects are important points to convey to the parents of the infant. As the child matures, advice should be included on water safety, prevention of fire hazards, and road safety. Adolescents need to know about the use of seatbelts; appropriate behavior in heavy traffic; bicycle safety; swimming safety; emergency first aid; sports and recreation safety; and the effects of smoking, alcohol, and drugs. 7 references.

182
Handbook for Safety Education: A Teacher's Handbook for Safety Education, Grades K-12.
South Carolina State Dept. of Education, Columbia. Comprehensive Health and Safety Unit.
Columbia, SC, the Department, 146 p., February 1981.

The South Carolina State Department of Education developed a handbook to assist all classroom teachers and administrators in organizing, planning, and implementing a comprehensive safety program for grades K-12 at the local school or district level. Each classroom unit is devoted to a single safety topic. The handbook includes projects, discussions, posters, skits, checklists, quizzes, home inspections, and other activities for classroom use. Section I provides 28 safety units for use with elementary school students. Section II focuses on seven units aimed at secondary school students. Section III presents an extensive list of relevant resources. Educators have a responsibility to provide a safe environment in and around schools. Also, classroom activities should be designed to promote children's safety at school, play, and leisure activities. It is recommended that each school develop and establish a Safety Team or Safety Council to periodically evaluate the program's effectiveness. 15 references.

183

Strategies for Child Safety (Editorial).

Vimpani, G. V.

Australian Paediatric Journal (Melbourne) 18(4):235-237, December 1982.

In Australia there has been growing concern over developing effective strategies aimed at reducing the number of childhood accidents. Family stress has been shown to be associated with an increased occurrence of childhood accidents. A variety of personal behavioral attributes has also been associated with increased risk. Education of families may not be effective, since those most at risk are often the least receptive to the information. Work has been done recently to use marketing techniques to promote health. Legislation has made significant positive changes in Australia. Improved product design, which provides the passive approach to injury prevention, is also supported. This improves the environment rather than relying on the behavior of the host (parents and children) to change their behavior. Quantitative evaluation and epidemiological methods are needed to prove effectiveness. Pediatricians, health care workers, and safety organizations can work to change the attitude that accidents can not be prevented.

184

Child Safety: It's No Accident: An Issue Statement.

Virginia State Div., for Children, Richmond, VA.

Richmond, VA, the Division, 14 p., 1981.

Available from: ERIC; Order No. ED-224 551.

Automobile-related accidents, poisoning, and suicide are the three major cases of injury and death among children in the state of Virginia. The most frequent cause of death is from injuries sustained in automobile accidents. Adults traveling with child passengers must assume responsibility for the safety of these children. Acute poisonings, the second most frequent cause of death overall and the most common pediatric medical emergency, accounts for about 10 percent of emergency room contacts and about 5 percent of hospital medical admissions. Nearly all poisonings are accidental and involve children less than 10 years of age. There is no statewide lead poisoning screening program at present in Virginia, so the true incidence of this cause is difficult to assess. While a health department employee visits school systems and instructs officials in methods of dealing with asbestos, funds for protecting children from asbestos poisoning are inadequate. The third leading cause of death is suicide. The conditions that precipitate suicidal acts in young people have become more intense, including such factors as broken relationships with parents and substance abuse. Some problems of adolescents may be solved through wide use of and destigmatization of community-based mental health service agencies. Citizen advocacy and involvement are needed to insure the implementation of community, regional, and statewide programs addressing these problems. 13 references.

185

Safety Education in the Elementary School.

Wayne, J. E.

Bloomington, IN, Phi Delta Kappa Educational Foundation (Fastback Series; 170), 38 p., 1982.

Effective safety education can be incorporated into the elementary school curriculum to (1) increase the child's knowledge of the potential hazards imposed by the environment, (2) help develop attitudes of safe living that will predispose the child to safe living throughout life, and (3) help develop skills to deal effectively with potentially hazardous situations. Developing the effective school education program can begin by establishing a safety education advisory committee made up of school staff and representatives from industry and the community. A curriculum committee should translate the philosophy and goals of the advisory committee into a dynamic curriculum. The program needs to address the following accidents: motor vehicle, pedestrian, bicycle, water safety, home, falls, fires, firearms, and poisoning. Seasonal safety considerations and dangerous fads and crazes should also be addressed. Safety education is a life long process but skills and attitudes should be initiated in elementary school. 19 references.

186

Developmental Approach to Injury Prevention.

Zuckerman, B. S. and Duby, J. C.

Pediatric Clinics of North America 32(1):17-29, February 1985.

The developmental approach to injury prevention can characterize how a child's behavior (i.e. an accident) reflects the child's temperament and behavioral style, motivation to accomplish certain tasks, and competencies at different ages. Temperament itself does not cause accidents, but the interaction between temperament and environment may result in an injurious outcome. Motivation reflects children's interest in accomplishing a task whether they are physically able to or not. Motor, language, cognitive, and social-emotional skills develop with age. By examining children's functioning at certain developmental stages, theoretical and common sense reasons for risk of certain injuries become evident. Child health professionals can use this framework to focus their safety counseling on the most relevant areas for their particular audience. Developmental considerations can be used for anticipating guidance regarding safety issues and also to help establish the most effective limits for each individual. Future research will better evaluate the role of the child in the accident situation. 39 references.

187

Basic Aid Training (BAT).

American Red Cross, National Headquarters, Youth Services
17th & D Streets, NW, Washington, DC 20006
Continuing.

The instructor's guide is divided into seven lessons, each covering various emergencies, what to do, and how to get help. The guide also includes educational objectives, a teaching plan, instructor and classroom preparation information, and equipment and material list. Twenty-one colored posters visually reinforce learning, and a final BAT Quiz sums up information. Each packet includes an instructor's guide and 21 posters. BAT promotional flyer, student completion certificates, and bright BAT buttons are also available. Volunteer service projects, guest speakers, demonstrations, and participation in other Red Cross courses are examples of additional activities easily integrated into the established curriculum. Course instructor requirements include a Red Cross orientation, current certificate in Red Cross basic first aid or multimedia standard first aid, and a rapport with an understanding of children. Evaluation strategies are incorporated into the instructor's guide. These include learning objectives, worksheets, guided skill practice, and oral questions and answers between teacher and student.

188

Child Accident Prevention Foundation of Australia. College of Surgeons Gardens, Spring Street, Melbourne, Victoria 3000, Australia
1979 - Continuing.

The Child Accident Prevention Foundation of Australia (CAPFA) assists in designing and developing educational and intervention programs that help prevent childhood accidents. The program attacks the problem on a national basis through divisions in each Australian State and territory. Research projects, seminars, and publications, including a quarterly journal, provide information on child safety. A reference file of all relevant literature and Safety Resource Centers provide readily available data on all aspects of the prevention of accidents in childhood. Each year almost 700 children die in Australia as a result of accidents, and approximately 80,000 are admitted to hospitals. To reduce these statistics, better liaison should be established between concerned organizations. Ongoing education must be directed at parents, children, and teachers. Legislation must be amended or enacted to require adequate standards, product supervision, and the development of safe designing of children's products. Many research projects are currently being funded by CAPFA. The role of the family in accident prevention and the provision of assistance for the underprivileged, the disadvantaged, and the dysfunctional in the community must be addressed. 9 references.

189

Child Accident Prevention Trust. 75 Portland Place, London W1N 3AL, England
Funding Source: Dept. of Health and Social Security, London (England).
September 1979 - Continuing.

The Child Accident Prevention Trust was established in September 1979 to (1) encourage investigation and research into childhood accidents, (2) promote a better understanding of a child's need for a safe yet stimulating environment, and (3) disseminate information about the nature and incidence of childhood accidents and their prevention. The Trust, which is located in London, England, initiates and sponsors research, acts as liaison between groups and individuals working in this field, arranges seminars and meetings, and maintains a resource center. Current activities focus on (1) local initiatives in accident prevention; (2) reporting burn, scald, and drowning accidents; (3) recording school accidents; (4) determining the role of safety standards in accident prevention; and (5) collecting anthropometric and biomechanical data on designing child related products. Since a multidisciplinary approach to accident prevention is most effective, the links between accidents, child development, the environment, and socioeconomic factors are emphasized.

190

Child Safety Club.

Imhulse, D.
National Safety Council, 444 N. Michigan Avenue, Chicago, IL 60611
1980 - Continuing.

The Child Safety Club of the National Safety Council uses a positive approach to teach basic safety principles to young children. For a fee, a child can be enrolled in the club on the child's third birthday. At that time and at 6-month intervals through the fifth birthday, the child receives an illustrated book of safety lessons. Activities include puzzles, quizzes, and pop-outs that deal with safety at home at play, and in the traffic. The club is effective because the child learns from a parent who knows the child's learning traits and because the learning method is personalized and fun. In addition, the activities help children to develop decision-making capabilities while under the supervision of a trusted adult.

191

The Fireman Red International Child Safety Program.

Schock, H. P. and Allen, K. C. P.O. Box 1360, Evergreen, CO 80439-1360
1981 - Continuing.

Developed in 1981, the Fireman Red program provides program sponsors with educational materials to teach children about poison prevention, burn prevention, bicycle safety, and water safety. Fireman Red is a cartoon figure used to help prevent accidents and accidental deaths among children. Sponsors choose the topics of interest for their locale and distribute educational materials developed by and available from Fireman Red International. Parents then work with their children at home to reinforce the topics. Sponsors may develop and distribute their own materials with the Fireman Red name and symbol as long as they obtain approval from Fireman Red International. New materials are being developed based on recommendations from experts in related fields. Currently, stickers, brochures, audiovisual presentations, and a safety game are available for program sponsors to purchase.

192
Health And Safety Course For Primary Grades.
American Red Cross, National Headquarters 17th & D Streets, N.W., Washington, DC 20006
Continuing.

In large colorful posters, children see friendly animals who turn lessons on health and safety into short rhymes. Nine units cover such themes as nutritious foods, water safety, poison awareness, environmental protection, etc. Notes on the back of each poster stimulate discussions around the unit themes. The teacher's guide outlines each unit with purposes, guidelines, suggested student activities, and first aid pointers. The guide also includes a safety checklist, puppet show themes, a health and safety week project plan and resources of other Red Cross materials, and other groups to contact for additional information. Each packet includes the teacher's guide, nine (11 x 14 inch) posters, one large poster (14 x 22 inch), and 25 course completion certificates. A health and safety course for primary grades promotional flyer is also available. The course materials are flexible and encourage health and safety themes into many settings and subjects such as drawing, creative writing, and social studies. Volunteer service projects, guest speakers, demonstrations, and participation in other Red Cross courses are examples of additional activities easily integrated into established curriculum. Course instructor requirements include a Red Cross orientation, and a rapport with and understanding of children. Evaluation strategies are incorporated into the instructor's guide. These include learning objectives, worksheets, guided skill practice, and oral questions and answers between teacher and student.

193
The Injury Prevention Program (TIPP).
Witty, N.
American Academy of Pediatrics, P.O. Box 1034, 1801 Hinman Avenue, Evanston, IL 60204
Funding Source: McNeil Consumer Products Co., Fort Washington, PA.
March 1983 - Continuing.

The Injury Prevention Program (TIPP), produced by the American Academy of Pediatrics Committee on Accident and Poison Prevention, provides physicians with materials to assist them in providing injury prevention counseling. A kit provides four health hazard appraisal forms specific to the developmental age of infants and children. The program, started in March 1983, stresses that anticipatory guidance for injury prevention should be an integral part of medical care. A parent safety questionnaire (the Framingham Safety Survey) provides developmentally oriented questions to help identify those areas of injury prevention in which parents need counseling. An early childhood safety counseling schedule gives physicians a framework for teaching parents about age related risks. The kit may be ordered from the American Academy of Pediatrics. A manual is being developed for physicians, which will be available in a couple years.

See also abstract nos. 160, 165, 170, 174.

194
National Injury Information Clearinghouse.
Johnston, N. S.
Consumer Product Safety Commission, 5401 Westbard Avenue, Room 625, Washington, DC 20207
1973 - Continuing.

The National Injury Information Clearinghouse collects, investigates, analyzes, and disseminates injury data and information relating to the causes and prevention of death, injury, and illness associated with consumer products. The clearinghouse performs the following functions: (1) maintains The National Electronic Injury Surveillance System (NEISS) which gathers, through automated data bases, injuries reported by hospital emergency departments; (2) performs detailed investigative reports of injuries associated with consumer products; (3) extracts product-associated deaths from death certificates; and (4) receives consumer complaints. The clearinghouse distributes publications such as hazard analyses, special studies, and data summaries. The target audience for clearinghouse information includes educators, manufacturers and industry associations, consumer groups, researchers, attorneys, individuals, and the Consumer Product Safety Commission. The clearinghouse responds to about 6,000 requests for information a year. Most requests are answered without charge.

195
Play It Safe.
Health Education Council, 78 New Oxford Street, London WC1A 1AH, England
1981 - 1982.

The Play It Safe program provides a multidisciplinary approach to childhood accident prevention in the United Kingdom. The campaign consisted of three components: (1) a television series of 10 programs, each 10 minutes long; (2) the establishment of local groups to organize events and disseminate information; and (3) a 36-page Play It Safe booklet. Both the television series and the booklet devoted separate segments to various types of accidents including poisoning, scalding, accidents at play, pedestrian accidents, cuts, and drowning. In addition, the booklet devoted a chapter to choking and suffocation in young children with a section on first aid and a list of references for further information. Ninety-six percent of the viewers of the television series found the programs to be interesting. Seven hundred fifty thousand booklets were distributed. Of those who wrote to request copies, 97 percent were pleased with it. There is some evidence that the total campaign caused a slight change in people's attitudes towards child safety. In both the television series and the booklet, pictures of injured children upset many viewers and readers, but these were considered necessary. Continued stimulation of concern and interest in childhood accident prevention are important to help create a climate where environmental alterations will be reorganized.

See also abstract nos. 016, 162, 163.

196

Prevention Satellite Safety Program.

Bekofsky, D.

Suffolk County Department of Health Services, 225 Rabro Drive E., Hauppauge, NY 11788.

May 1983 - Continuing.

The Prevention Satellite Safety Program was developed in May 1983 by the Suffolk County (New York) Department of Health Services to help prevent injury and death associated with childhood accidents. The Prevention Satellite Safety Program, targeted at elementary school children (grades 4 through 6), is designed to decrease injuries and deaths due to accidents and to improve the health and safety habits of elementary school children. Program objectives include (1) informing elementary school children about safety and accident prevention, (2) encouraging the children to adopt healthy and safe behaviors and to assume responsibility for their health, (3) helping them in identifying safety hazards in their environments, and (4) increasing children's awareness of the importance of safety and accident prevention in maintaining and improving health. The program includes poster and writing contests, a 45-minute safety presentation for children in elementary schools and summer day camps, supplemental safety education publications, and seasonal safety displays exhibited in county libraries. Participation in the year round safety program has increased steadily, reaching more than 8,000 children aged 6 to 12 years. More than 200 safety programs were presented to children in summer day camps and elementary schools, and over 20,000 publications were distributed. The program receives praise from educators, and requests for program services continue to increase.

197

Primary and Middle Schools Safety Education Programme.

Parlanti, T.

London Borough of Merton, Development Department, Accident Prevention Section, Crown House, London Road, Morden, Surrey, SM4 5DX, England

Continuing.

The Accident Section of the London, England, Borough of Merton, Development Department sponsors primary and middle school safety education programs to create positive attitudes toward road safety and to train students to reduce the number of casualties occurring on the road. The target audience is children in nursery school, selected playgroups, and students at 38 primary and 15 middle schools. A film and talk show are presented at least once a year. Students also participate in locally designed activities like role playing, story sessions, and model making. A mobile accident prevention van visits the schools where students take part in cycle proficiency training. Students are given safety workbooks that teach and reinforce road safety rules. Students receive badges or similar mementos upon completion of the courses. While program evaluation is difficult to assess, it is believed that the curriculum has helped to bring about a 28.4 percent reduction in child pedestrian casualties.

198

Rhode Island Accident Prevention Program.

Marciano, L. A. and Bender, G.Office of Health Promotion, Rhode Island Department of Health. 103 Cannon Building, 75 Davis Street, Providence, RI 02908

Continuing.

The school program consists of a reinforcement format involving a safety specialist who visits the schools presenting lessons on safety and a resource teacher who provides followup lessons on the same safety topic. Five topics are covered during the year: (1) pedestrian safety, (2) safety in the home, (3) fire safety, (4) poison prevention, and (5) summer safety. To educate health professionals in the area of accident prevention, a series of grand rounds are arranged with a local hospital in Providence. The community awareness program provides needed information on accident prevention in the form of posters, news articles, newsletters, display units, and quiz boards. Materials for use in the school program include films, filmstrips, and student study materials that were purchased through provided funds or borrowed from community agencies. The resource teacher and specialists implement the program in the schools. Pre- and posttests are utilized to evaluate the school program, along with surveys of teachers and administrators. Evaluation also consists of a process evaluation focusing on the implementation of the program as well as a product evaluation which will attempt to determine the impact of the program on the participant.

199

Youth Emergency Skills Workshop (Y.E.S.).

Newby, P. J.

Brokaw Hospital, 705 North Evans Street, Bloomington, IL 61701. Funding Source: BroMenn HealthCare, Normal, IL. 1984 - Continuing.

Changes in the traditional family structure have made it necessary for children to be able to make safe decisions and to respond appropriately to threatening situations on their own. Youth Emergency Skills Workshop (Y.E.S.) is a half-day program that gives children and their parents information on safety and appropriate responses to emergencies. Children and their parents in the Bloomington-Normal community in McLean County, Illinois, are the target population. The course teaches how to use the 911 and other emergency telephone numbers, basic fire safety at home, appropriate responses to interacting with strangers, basic traffic and bicycle safety, safety in the home, and first aid procedures. Police, firefighters, and nurses lead sessions that use lectures, audiovisual aids, role playing, and handouts as methods of conveying the information. Fifty children and their parents attend each session because this number allows for personal interaction. Critiques of the Y.E.S. program have been very positive. Community cooperation has involved the support of youth groups, a local newspaper, police and fire departments, elementary schools, and the Brokaw Hospital.

200

Injuries at a Water Slide — Washington.

Centers for Disease Control.

Morbidity and Mortality Weekly Report 33(27):379-382, 387, July 13, 1984.

Water slides are recreational devices designed to provide a descending ride into a splash-down pool at the base of the slide. An estimated 600 are in operation in the United States. In 1983, according to the National Electronic Injury Surveillance System of the Consumer Products Safety Commission, water slides accounted for the largest single share, 30% (2,941 cases), of injuries that occurred at amusement rides and were treated in emergency rooms in the United States. After a new outdoor waterslide opened on July 12, 1983 in Washington State, from July 13 to August 31, 65 persons injured there sought medical attention at local physicians' offices and emergency rooms while 178 patrons sought first aid at the water slide facility. The 65 medically treated sliders ranged in age from 8 years to 45 years and were treated for injuries including fractures, concussions, bruises and abrasions, and sprains and strains. 42 (65%) of these injured persons were female. Interviews with 46 (71%) of the injured persons identified two primary locations at which injuries occurred — the 45-degree drops and the final outlets. The slide operators instituted several changes throughout the summer to reduce the number of injuries including removing a curve, requiring every slider to wear a helmet on the first two rides, rounding the edge of the outer lip, and placing warning and instruction signs. Rates of injury declined during July and early August, but rose again in the latter half of August, noting that improvements in rate of injury were not closely related to the corrective measures taken.

201

Fatality at a Waterslide Amusement Park — Utah

Centers for Disease Control

Morbidity and Mortality Weekly Report 35(26):429-430, July 4, 1986

On August 16, 1985, a 14 year old male drowned when he disappeared into the water drainage pipe of a waterslide splash pool at a large waterslide amusement park in Ogden, Utah. It was determined that the cover for the drain pipe had been removed and not replaced, and the boy was carried by the gravitational force of the water into the 12 1/2-inch diameter drain pipe. The investigation into the death by the local health department led to the following recommendations: 1) any drainage pipe with a diameter greater than six inches must have protective grating and backup entrapment prevention features that are approved by the health department before installation; 2) grates must be attached by a corrosive-resistant, secure anchoring system and must be attached so they cannot be removed by bathers; and 3) there must be a written record documenting monitoring of pool safety features. In most waterslide splash pools, the drainage pipe inlet is too small to allow entrapment. This particular park included six slides, therefore increasing the volume of water and the size of the pipes. A safer alternative design would be to have more pipes with smaller diameter. Since 1983, the U.S. Consumer Product Safety Commission has received 10 reports of serious injury and three deaths associated with swimming-pool or hot-tub drainage systems. All thirteen reports involved children 14 years or younger, and six of the incidents, including all three fatalaties, were directly attributed to the cover of the drain pipe being removed and the victim being held by the suction of the water. Recirculation and drainage systems will remain a source of serious injury or death unless operators ensure that the systems are properly maintained. Adequate safety standards for the design and operation of swimming pools, hot tubs and waterslides should be adopted by state and local authorities.

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